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XXX First Nation

Building XXX

Maintenance Management Plan

Month Day, Year | Revision 0

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1. Introduction

The following Maintenance Management Plan has been prepared for the XXX First Nation in support of the XX Building Asset located on XX.

The purpose of this document is to outline Maintenance plans, costs, and labour, equipment and material required to perform preventative and major maintenance tasks for the XXX Building.

In conjunction with this manual, operating manuals of any installed equipment must always be consulted prior to start-up and shut-down, as well as for routine operation, maintenance, inspection, and repair.

The operation and maintenance specifications contained in this document are provided for reference only and DO NOT provide a complete overview of safe operating conditions and requirements. It is the responsibility of each Operator to comply with all applicable regulations such as Workplace Hazardous Materials Information System (WHMIS) and Occupational Health and Safety Regulations.

The information contained in this manual is specific to the XXX Building.

1. Building Asset Summary

This MMP has been developed using the following hierarchy of building categories:

|  |  |  |  |
| --- | --- | --- | --- |
| 1. **Site**
 | 1. **Structural**
 | 1. **Building Exterior**
 | 1. **Building Interior**
 |
| 1. **Mechanical**
 | 1. **Electrical**
 | 1. **Life Safety**
 | 1. **Elevating Devices**
 |

A summary of the XXX Building components, grouped by category, is found in section 2.1. For a general list of sub-categories within the 8 main categories, refer to Volume III – NmTC Buildings MMP Guidebook.

* 1. Building Overview

The XXX Building is located at 123 ABC Rd. PROVIDE SHORT DESCRIPTION OF BUILDING ie. *The two-storey, wood frame building was constructed circa 2014, and houses the administration offices*. Table 2.1 provides an overview of the building. See **Appendix A** for the Building Asset Data Collection worksheet.

Table - Administration Building Overview

|  |
| --- |
| GENERAL |
| Building Name |  |
| Address |  |
| Year of Construction |  |
| ICMS Asset ID |  |
| Unique Community ID |  |
| Total Site Area (m2) |  |
| Total Floor Area (m2) |  |
| Number of Stories |  |
| Construction Type |  |
| Building Use (ie. Office, Community Bldg., etc.) |  |
| Accessibility  |  |
|  |
| 1. SITE
 |
| * *PROVIDE A GENERAL DESCRIPTION OF THE SITE*
 |
| 1. STRUCTURAL
 |
| * *INDICATE NUMBER OF STORIES, TYPE OF CONSTRUCTION (WOOD FRAME, STEEL, etc.), FOUNDATION TYPE AND OTHER STRUCTURAL ELEMENTS.*
 |
| 1. EXTERIOR FINISHES / BUILDING ENVELOPE
 |
| * *PROVIDE A DESCRIPTION OF EXTERIOR FINISHES INCLUDING SIDING, ROOF SYSTEM, WINDOWS, AND DOORS*
 |
| 1. INTERIOR COMPONENTS
 |
| * *PROVIDE A DESCRIPTION OF INTERIOR FINISHES INCLUDING WALL, CEILING AND FLOOR FINISHES, MILLWORK, WASROOM ACCESSORIES, AND APPLIANCES.*
 |
| 1. MECHANICAL
 |
| * *PROVIDE A DESCRIPTION OF THE MECHANICAL SYSTEMS INCLUDING HEATING, COOLING, VENTILATION, PLUBING, AND ASSOCIATED CONTROL SYSTEMS.*
 |
| 1. ELECTRICAL
 |
| * *PROVIDE A DESCRIPTION OF THE ELECTRICAL SYSTEM INCLUDING POWER, LIGHTING, ALARMS, AND ASSOCIATED CONTROL SYSTEMS.*
 |
| 1. FIRE PROTECTION
 |
| * *PROVIDE A DESCRIPTION OF THE FIRE PROTECTION SYSTEM INCLUDING FIRE EXTINGUISHERS AND SPRINKLER SYSTEMS.*
 |
| 1. ELEVATING DEVICES
 |
| * *PROVIDE A DESCRIPTION OF ELEVATING DEVICES INSTALLED IN THE BUILDING.*
 |

* 1. Building Photos

|  |
| --- |
| XXX BUILDING PHOTOS |
| PHOTO | PHOTO |
| *Provide description of photo here* | *Provide description of photo here* |
| PHOTO | PHOTO |
| *Provide description of photo here* | *Provide description of photo here* |
| PHOTO | PHOTO |
| *Provide description of photo here* | *Provide description of photo here* |
| *Add additional rows as required.* |  |
|  |  |

* 1. List of Qualified Sub-Contractors & Suppliers

Maintenance staff is encouraged to fill in the list of Consultants, Qualified Sub-Contractors, and Suppliers provided in **Appendix F**.

1. Available Drawings and Component Maintenance Manuals

*LIST AVAILABLE BUILDING CONSTRUCTION DRAWINGS AND MAINTENANCE MANUALS IN TABLES 2 AND 3 BELOW.*

Table – Construction Drawing

|  |  |  |
| --- | --- | --- |
| DRAWING SET NAME | ENGINEER/DESIGNER | DATE |
|  |  |  |
|  |  |  |
|  |  |  |
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Table - Maintenance Manuals

|  |  |  |
| --- | --- | --- |
| MAINTENANCE MANUAL TITLE | ENGINEER/DESIGNER | DATE |
|  |  |  |
|  |  |  |
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1. Health and Safety Policies

*REVIEW SECTION 4 AND MODIFY AS REQUIRED TO SUITE BUILDING*

It is important to note that workplace safety for all staff and employed maintenance personnel is an employer responsibility. All maintenance should be conducted with Occupational Health & Safety in mind by all parties. It is recommended all Communities have a designated qualified and trained Safety Officer.

WorkSafeBC has jurisdiction over the OH&S of employers operating in B.C. until it can be established otherwise. With respect to organizations involving First Nations or located on a reserve, the federal government, and not WorkSafeBC, will have jurisdiction over:

* Activities undertaken by a First Nation or band council, or an organization that is operated directly by or closely integrated with a First Nation or band council, that are related to the administration or governance of the First Nation or the reserve.
* An organization that is engaged in activities that are closely connected with First Nation status, rights or identity.

Jurisdiction remains with WorkSafeBC where the operations in question are not linked to band administration or First Nation status, rights or identity.

Ordinary commercial operations will fall under Board jurisdiction, even where the workers or owners of the business are First Nation owned, or the business is located on a reserve.

A Board prevention officer faced with the assertion that OH&S enforcement infringes a First Nation or treaty right should refer the matter to his or her manager.

For additional information, please refer to the WorkSafe BC website regarding Guidelines for the Workers Compensation Act:

https://www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/ohsguidelines/

guidelines-for-workers-compensation-act

Table - Health and Safety Policies

|  |  |
| --- | --- |
| HEALTH AND SAFETY POLICY | REFERENCE DOCUMENT |
| OHS Guidelines Part 4: General Conditions* Working Alone or In Isolation
* Ergonomics (MSI) Requirements
 | <https://www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/ohs-guidelines/guidelines-part-04> |
| OHS Guidelines Part 8: Personal Protective Clothing and Equipment | <https://www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/ohs-guidelines/guidelines-part-08> |
| OHS Guidelines Part 18: Traffic Control | <https://www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/ohs-guidelines/guidelines-part-18> |
| OHS Guidelines Part 4: General Conditions* Working Alone or In Isolation
* Ergonomics (MSI) Requirements
* Illumination
 | <https://www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/ohs-guidelines/guidelines-part-04> |
| OHS Guidelines Part 8: Personal Protective Clothing and Equipment | <https://www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/ohs-guidelines/guidelines-part-08> |
| OHS Guidelines Part 9: Confined Spaces | <https://www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/ohs-guidelines/guidelines-part-09> |
| OHS Guidelines Part 18: Traffic Control | <https://www.worksafebc.com/en/law-policy/occupational-health-safety/searchable-ohs-regulation/ohs-guidelines/guidelines-part-18> |

1. Relevant Regulations, Policies, and Permits

*REVIEW SECTION 4 AND MODIFY AS REQUIRED TO SUITE BUILDING*

Building specific regulations, policies, and permits are unique to each building, no information was provided at the time of report preparation. Typical Building Permits from local Authorities Having Jurisdiction are generally not applicable to most First Nation buildings / facilities. Typical Regulations / Policies that may apply for some Buildings will consist of but not be limited to:

1. WorkSafe, and OH & S Regulations
2. National & British Columbia Building Codes
3. Building Envelope Best Practices
4. ASHREA Standards for ventilation. (American Society of Heating, Refrigeration and Air-Conditioning Engineers).
5. BC. Electrical Code
6. BC. Fire Code
7. For Schools, per the BC. Ministry of Education:
	1. Ministry of Education, Area Standards,
	2. Ventilation Best Practices Guidance

Typical Permits that may apply for some Buildings will consist of but not be limited to:

1. Environmental Permits for land use and riparian setbacks. (federal).
2. Mechanical Boiler & Gas:
	1. Technical Safety BC. Gas Equipment and Boiler Commissioning Form.
3. Electrical Permit. This is required by the Contractor providing the installation of new infrastructure upgrades, new building services or, service upgrades.
	1. Required are:
		1. Technical Safety BC. Electrical Installation Permit,
		2. Technical Safety BC. Certificate of Inspection.
4. Elevating Devices: Please see, <https://www.technicalsafetybc.ca/elevating-devices>
5. Other:  VIHA, Food Facility Inspection Report
6. Preventative Maintenance Schedule

An Annual Building Maintenance Schedule is provided in **Appendix B**. The Annual Maintenance Schedule contains a list of all inspection and preventative maintenance tasks including:

* Activities with work orders numbered and grouped to indicate the work required for individual workers or contractors;
* Person-hours for each activity shown weekly with a summary of total hours for the year
1. Preventative Maintenance Budget

An Annual Building Maintenance Budget is provided in **Appendix C**. The budget shows the Operation and Maintenance costs including:

* An estimate of the annual cost of routine maintenance;
* An estimate of the annual cost of contracts including proactive and reactive maintenance.
1. Work Orders

Work Orders for the Building components are provided in **Appendix D**.

Each Work Order describes:

* The location of components of the system to be maintained;
* The component quantity and/or number of inventory units to be maintained;
* Step by step, simple instructions of the routine and special maintenance duties;
* The safe number of persons required, and the equipment, tools and materials needed;
* The frequency or level of service;
* Estimated number of person-hours involved in each task;
* Contracted services if required.
	1. Work Order Index

The following table lists the majority of suggested maintenance work orders applicable to the XXX Building.

*FILL IN TABLE 5 WITH WORK ORDER LIST FROM TAB****.2 WORK ORDERS*** *FROM THE 1.0 NmTC MMP\_Buildings Workbook*

Table - Table of Work Orders

|  |  |  |  |
| --- | --- | --- | --- |
| CATEGORY | WORK ORDER  | DESCRIPTION | FREQUENCY |
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* 1. Recommended Maintenance Equipment

A list of recommended tools/equipment and materials/supplies to conduct maintenance work outlined in the suggested work orders is provided in **Appendix E**.

1. Reporting

Templates for Reporting are found in **Appendix F**. The reporting templates include layout for input such as:

* Routine inspection and special maintenance duties;
* Operation and Maintenance and monitoring data log;
* Maintenance Personnel name, training and certification information;
* Proposed O&M cost estimate for each task related to routine inspection/maintenance including:
	+ Wages,
	+ Service contractors,
	+ Utility bills,
	+ Repair/Replacement Costs.

Appendix A

Building Data Collection Sheet

Appendix **B**

Annual Maintenance Schedule

Appendix C

Annual Maintenance Budget

Appendix D

Work Orders

Appendix E

Suggested Equipment List

Appendix F

Reporting