Asset Management Planning

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CVRD

Overview

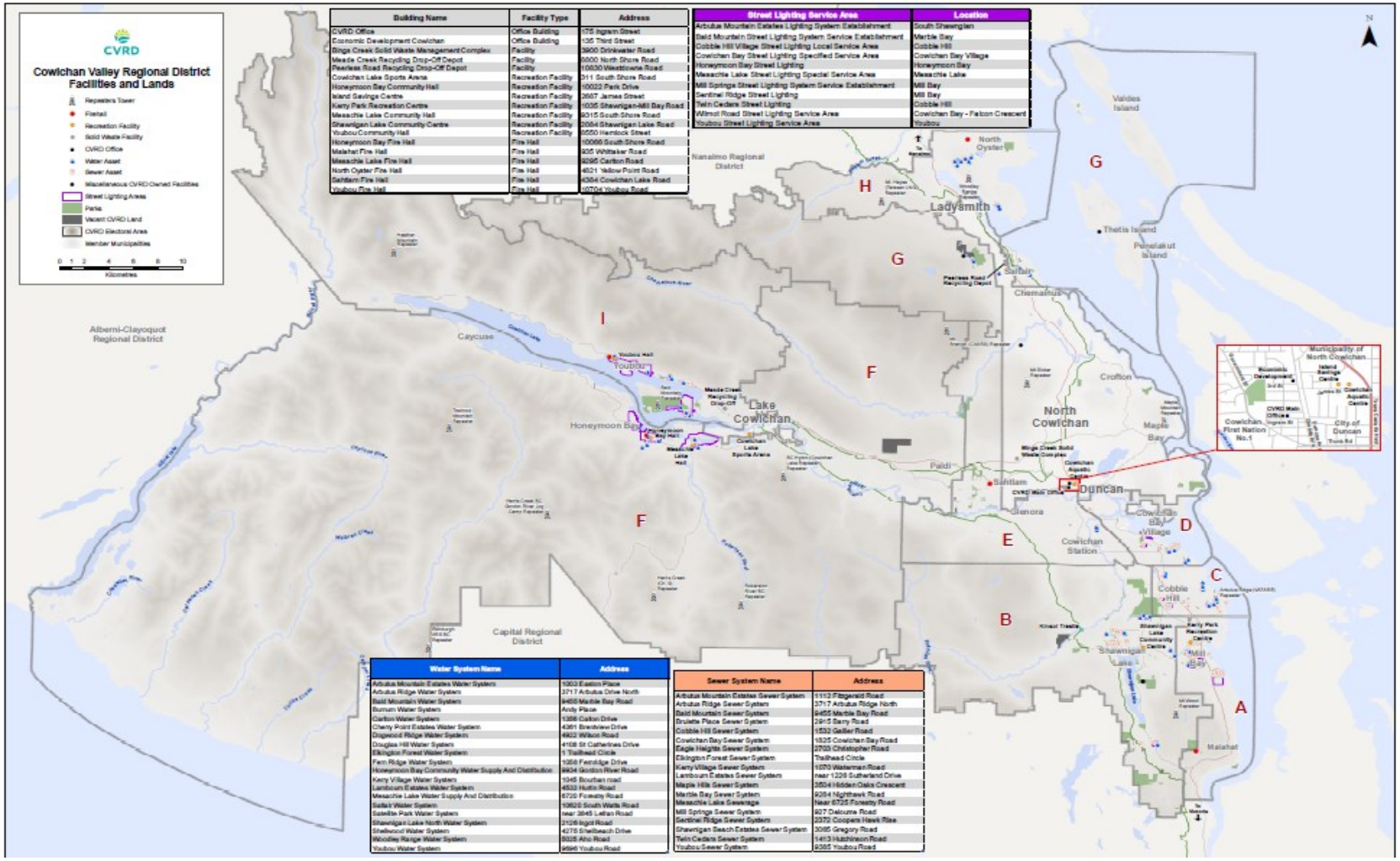
1. Cowichan Valley Regional District (CVRD)
   a) Location, Population
   b) Organization Structure
   c) Services and Assets
2. Asset Management
   a) Getting Started
   b) Objectives
   c) Our Approach
   d) Where are we now?
3. Challenges

CVRD

Cowichan Valley Regional District

CVRD

Cowichan Valley Regional District



Building Name	Facility Type	Address
CVRD Office	Office Building	175 Ingram Street
Economic Development Cowichan	Office Building	135 Third Street
Bings Creek Solid Waste Management Complex	Facility	3900 Drinkwater Road
Meade Creek Recycling Drop-Off Depot	Facility	6600 North Shore Road
Peerless Road Recycling Drop-Off Depot	Facility	10830 Westdowne Road
Cowichan Lake Sports Arena	Recreation Facility	311 South Shore Road
Honeymoon Bay Community Hall	Recreation Facility	10022 Park Drive
Island Savings Centre	Recreation Facility	2687 James Street
Kerry Park Recreation Centre	Recreation Facility	1035 Shawnigan-Mill Bay Road
Mesachie Lake Community Hall	Recreation Facility	9315 South Shore Road
Shawnigan Lake Community Centre	Recreation Facility	2084 Shawnigan Lake Road
Youbou Community Hall	Recreation Facility	6550 Hemlock Street
Honeymoon Bay Fire Hall	Fire Hall	10066 South Shore Road
Malahat Fire Hall	Fire Hall	935 Whittaker Road
Mesachie Lake Fire Hall	Fire Hall	9295 Carlton Road
North Oyster Fire Hall	Fire Hall	4521 Yellow Point Road
Sahtlam Fire Hall	Fire Hall	4304 Cowichan Lake Road
Youbou Fire Hall	Fire Hall	10704 Youbou Road

Street Lighting Service Area	Location
Arbutus Mountain Estates Lighting System Establishment	South Shawnigan
Bald Mountain Street Lighting System Service Establishment	Marble Bay
Cobble Hill Village Street Lighting Local Service Area	Cobble Hill
Cowichan Bay Street Lighting Specified Service Area	Cowichan Bay Village
Honeymoon Bay Street Lighting	Honeymoon Bay
Mesachie Lake Street Lighting Special Service Area	Mesachie Lake
Mill Springs Street Lighting System Service Establishment	Mill Bay
Sentinel Ridge Street Lighting	Mill Bay
Twin Cedars Street Lighting	Cobble Hill
Wilmot Road Street Lighting Service Area	Cowichan Bay - Falcon Crescent
Youbou Street Lighting Service Area	Youbou

Water System Name	Address
Arbutus Mountain Estates Water System	1003 Easton Place
Arbutus Ridge Water System	3717 Arbutus Drive North
Bald Mountain Water System	9455 Marble Bay Road
Bumum Water System	Andy Place
Carlton Water System	1308 Carlton Drive
Cherry Point Estates Water System	4361 Brandview Drive
Dogwood Ridge Water System	4922 Wilson Road
Douglas Hill Water System	4108 St Catherines Drive
Elkington Forest Water System	1 Trailhead Circle
Fern Ridge Water System	1058 Ferndale Drive
Honeymoon Bay Community Water Supply And Distribution	9404 Gordon River Road
Kerry Village Water System	1045 Bourbon road
Lambourn Estates Water System	4533 Hutto Road
Mesachie Lake Water Supply And Distribution	6726 Forestry Road
Sahtlam Water System	10602 South Wells Road
Satellite Park Water System	near 3845 Lefran Road
Shawnigan Lake North Water System	2126 Ingot Road
Shellwood Water System	4276 Shellbeach Drive
Woodley Range Water System	9225 Alto Road
Youbou Water System	9946 Youbou Road

Sewer System Name	Address
Arbutus Mountain Estates Sewer System	1112 Fitzgerald Road
Arbutus Ridge Sewer System	3717 Arbutus Ridge North
Bald Mountain Sewer System	9455 Marble Bay Road
Drusilla Place Sewer System	3915 Barry Road
Cobble Hill Sewer System	1532 Geller Road
Cowichan Bay Sewer System	1825 Cowichan Bay Road
Eagle Heights Sewer System	2705 Christopher Road
Elkington Forest Sewer System	Trailhead Circle
Kerry Village Sewer System	1070 Waterman Road
Lambourn Estates Sewer System	near 1226 Sutherland Drive
Maple Hills Sewer System	3504 Hidden Oaks Crescent
Marble Bay Sewer System	9264 Nighthawk Road
Mesachie Lake Sewerage	near 6725 Forestry Road
Mill Springs Sewer System	927 Deloume Road
Sentinel Ridge Sewer System	2372 Coopers Hawk Rise
Shawnigan Beach Estates Sewer System	3085 Gregory Road
Twin Cedars Sewer System	1413 Hutchinson Road
Youbou Sewer System	9385 Youbou Road

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Cowichan Valley Regional District

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CVRD Organizational Structure

Board of Directors

Brian Carruthers
Chief Administrative Officer

Cynthia Lockrey
Manager
Strategic Services

Allison Nelson
Executive Assistant

Mark Kueber
General Manager
Corporate Services Department

- Finance
- Human Resources
- Information Technology
- Legislative Services
- Procurement

Hamid Hatami
General Manager
Engineering Services Department

- Asset Management
- Capital Projects Management
- Environmental Services
- Recycling & Waste Management
- Water Management

Ross Blackwell
General Manager
Land Use Services Department

- Community & Regional Planning
- Development Services
- Economic Development
- Building Inspection & Bylaw Enforcement
- Parks & Trails

John Elzinga
General Manager
Community Services Department

- Public Safety
- Facilities & Transit
- Arts & Culture
- Cowichan Lake Recreation
- Island Savings Centre
- South Cowichan Recreation

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3 Recycling Centres

6 Fire Halls

Malahat Fire Department

Honeymoon Bay Fire Hall

Mesachie Lake Fire Hall

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6 Community Halls

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53 Parks

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19 Water Systems & 16 Sewer Systems

Saltair Water Treatment Plant

CVRD

3 Recreation Centres with Ice Plants

Getting Started

1. What initiated the CVRD Asset Management Planning Process?
2. How did the CVRD get buy-in from Senior Management?
3. How did the CVRD get buy-in from the Board?

CVRD

Strategic Focus Areas

1 EXCELLENCE IN REGIONAL LAND USE PLANNING

ACTIONS

1.1 **GROWTH AND DEVELOPMENT**
Develop a regional planning strategy that addresses a range of land use issues and influences across all municipalities and electoral areas to ensure sustainable and coordinated management of growth and development.

2 RESPONSE TO CLIMATE CHANGE

ACTIONS

2.1 **CLIMATE CHANGE RISK ASSESSMENT**
Undertake a comprehensive risk assessment of climate change impacts on land use planning, infrastructure, operations and public safety.

2.2 **CLIMATE CHANGE ADAPTATION STRATEGY**
Based on risk assessment outcomes, develop prioritized strategies for responding and adapting to the impacts of climate change.

2.3 **GHG REDUCTION STRATEGY**
Develop strategies for the reduction of corporate greenhouse gas emissions (GHG) and achievement of carbon neutrality.

3 SOUND FISCAL MANAGEMENT

ACTIONS

3.1 **USE OF RESOURCES**
Undertake a regular process to examine the delivery of various CVRD services to ensure the effective use of resources.

3.2 **ASSET MANAGEMENT PLAN**
Develop a comprehensive plan, strategies and associated policies to ensure sustainability of infrastructure and the services they provide.

3.3 **BUDGET TRANSPARENCY**
Improve the financial planning process and supporting information to promote greater awareness of and confidence in the CVRD five-year financial plan.

3.4 **ACHIEVING OBJECTIVES**
Implement a process for measuring the CVRD's performance in delivering services and achieving objectives.

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Asset Management - Objectives

The main objective is to develop a detailed Asset Management Plan (AMP).

We have divided the project in 3 phases:

1. 1st Phase – Asset Inventory development
2. 2nd Phase – Asset Policies development
3. 3rd Phase – Asset Management Plan preparation

In future we will start with the Natural Capital Assets.

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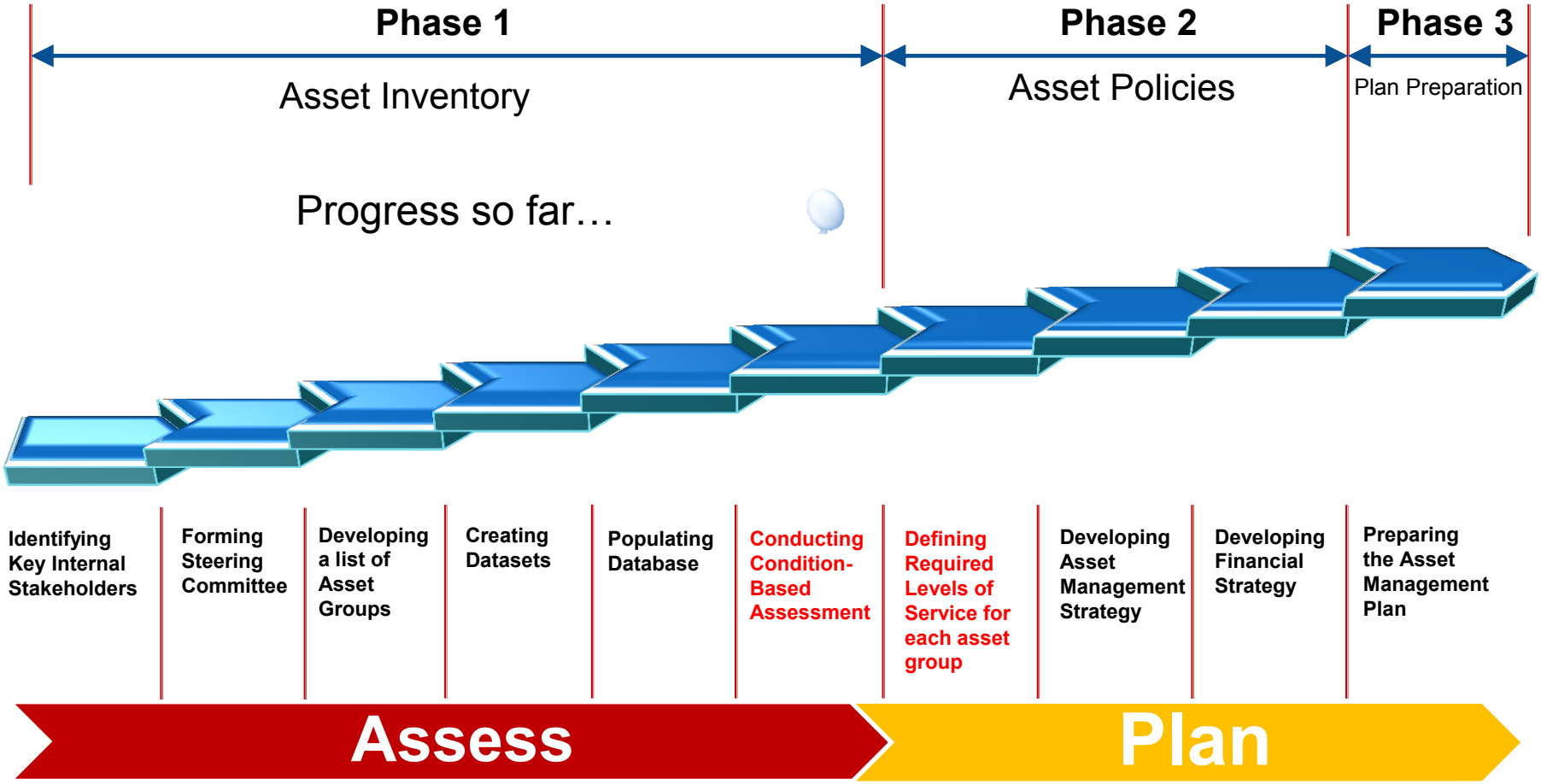
Our Approach



Asset Management BC Framework

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CVRD Organizational Structure

Executive Steering Committee

Steering Committee

Board of Directors

Cynthia Lockrey
Manager
Strategic Services

Allison Nelson
Executive Assistant

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General Manager
Corporate Services Department

- Human Resources
- Legislative Services
- Procurement

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General Manager
Land Use Services Department

- Capital Projects Management
- Environmental Services

- Community & Regional Planning
- Development Services
- Economic Development
- Building Inspection & Bylaw Enforcement

John Elzinga
General Manager
Community Services Department

- Cowichan Lake Recreation
- Island Savings Centre
- South Cowichan Recreation

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Roles and Responsibilities

ACTIVITIES	RESPONSIBILITY									
	Steering Committee					Executive Steering Committee				
	Utilities	Solid Waste	Parks	Facilities	Public Safety	Finance	IT	Asset Coordinator	Project Manager	Project Sponsor
Phase I - Asset Inventory										
Setting Up the 1st SC meeting	N	N	N	N	N	N	N	R	PC	PC
Asset Groups										
Developing an Asset Group List (including sub-groups)	C	C	C	C	C	I	I	R	PR	I
Datasets										
Developing a Dataset to capture Asset Types, quantity, and age for each Asset group	I	I	I	I	I	C	C	IR	PR	I
Database Population										
Populating the Dataset	I	I	I	I	I	C	C	IR	PR	I
Condition-Based Assessment										
Conducting a Condition-Based Asset review based on standard engineering practices	C	C	C	C	C	N	N	C	PR	I
Submitting the Condition-based asset review to SC for Comments	N	N	N	N	N	N	N	R	PR	I
Finalizing the Condition-Based Asset Review as per rec'd comments	C	C	C	C	C	R	R	RC	PR	R
Phase I - Asset Inventory Complete										

P – Prime, Accountable; R – Reviews Deliverables; C – Creates Deliverables; I – Provides Input; N – Notified

Condition Assessment Rating System

	Condition (Grade)	Performance	Structure	External	Internal	Services	Fittings	Typical Useful Life Remaining
5 /5	Excellent (A)	Fits for Future	Sound structure.	Constructed with sound materials, true to line and level. No evidence of deterioration or discolouration	Constructed with sound materials, true to line and level. No evidence of deterioration or discolouration	All components operable and well maintained.	Well secured and operational, sound of function and appearance.	Greater than 45%
4 /5	Good (B)	Adequate for Now	Functionally sound structure.	Showing minor wear and tear and minor deterioration of surfaces.	Showing minor wear and tear and minor deterioration of surfaces.	All components operable.	Operational and functional, minor wear and tear.	Between 10% to 45%
3 /5	Fair (C)	Requires Intervention	Adequate structure, some evidence of foundation movement, minor cracking	Appearance affected by minor cracking, staining, or minor leakage. Indications of breaches of weatherproofing. Minor damage to coatings.	Appearance affected by minor cracking, staining, or minor leakage, some dampness or mildew. Minor damage to wall/ceiling finishes	Occasional outages, breakdowns or blockages. Increased maintenance required.	Generally operational. Minor breakage.	
2 /5	Poor (D)	At Risk	Structure functioning but with problems due foundation movement. Some significant cracking.	Damaged, weakened or displaced. Appearance affected by cracking, staining, overflows, or breakages. Breaches of weatherproofing evident. Coatings in need of heavy maintenance or renewal.	Damaged, weakened or displaced. Appearance affected by cracking, staining, dampness, leakage, or breakages. Breaches of waterproofing evident. Finishes of poor quality and in need of replacement.	Failures of plumbing electrical and mechanical components common place.	Fittings of poor quality and appearance, often inoperable and damaged.	
1 /5	Very Poor (F)	Unfit for Sustained Service	Structure has serious problems and concern is held for the integrity of the structure	Badly damaged or weakened. Appearance affected by cracking, staining, overflows, leakage, or damage. Breaches of waterproofing. Coatings badly damaged	Badly damaged or weakened. Appearance affected by cracking, staining, leakage, or wilful damage. Breaches of waterproofing. Finishes badly damaged, marked and in need of replacement.	Plumbing electrical and mechanical components are unsafe or inoperable.	Most are inoperable or damaged	Less than 10%

Source: International Infrastructure Management Manual – Version 3.0, 2006 (http://openlibrary.org/books/OL21245688M/International_infrastructure_management_manual)

Condition Assessments

Level 1 Major Group Elements	Level 2 Group Elements	Level 3 Individual Elements	COMPONENT	CONDITION ASSESSMENT					LIFECYCLE DATA		
			ID	Condition	Performance	Yr New or Last Major Action	Assessment Date	Assessed By	Age in 2017	Typical Life Cycle or Action Interval	Est. Time Remaining to EOL or Major Action
A Substructure	A10 Foundations	A1030 Slab on Grade	A103001 Standard Slab on Grade	Good	Fits for Future	1971	31-May-17	MH	46	75	29
B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B2010 Exterior Walls - Stucco	Good	Fits for Future	1971	31-May-17	MH	46	60	14
B Shell	B20 Exterior Enclosure	B2010 Exterior Walls	B2010 Exterior Walls - Vinyl Siding	Fair	Fits for Future	1982	31-May-17	MH	35	40	5
B Shell	B20 Exterior Enclosure	B2020 Windows	B202001 Windows	Fair	Requires Intervention	1971	31-May-17	MH	46	35	5
B Shell	B30 Roofing	B3010 Roof Coverings	B301002 Slope Roof	Poor	At Risk	1998	31-May-17	MH	19	20	1
C Interiors	C10 Interior Construction	C1020 Interior Doors	C102001 Standard Interior Doors	Good	Fits for Future	1971	31-May-17	MH	46	75	29
C Interiors	C10 Interior Construction	C1030 Fittings	C103002 Toilet and Bath Accessories, Rehab	Fair	Fits for Future	1971	31-May-17	MH	46	20	1
D Services	D30 HVAC	D3090 Other HVAC Systems and Equipment	D309002 Refrigeration Systems	Good	Fits for Future	2010	31-May-17	MH	7	25	18
D Services	D20 Plumbing	D2020 Domestic Water Distribution	D202003 Domestic Water Equipment	Fair	Fits for Future	2006	31-May-17	MH	11	20	9
D Services	D50 Electrical	D5010 Electrical Services and Distribution	D501003 Main & Secondary Switchgear	Fair	Fits for Future	1971	31-May-17	MH	46	60	14
G Building Sitework	G30 Site Civil and Mechanical Utilities	G3010 Water Supply	G301005 Fire Protection Water Storage	Poor	Requires Intervention	1947	31-May-17	MH	70	70	1

Challenges

Internal Challenges:

1. Understanding of Asset Management
   a) Staff
   b) Politicians
2. Staffing Capacity
   a) Interdepartmental Coordination
3. Software Package
4. Role of GIS

External Challenges:

1. Integration of Climate Change Risks

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Next Steps

1. Levels of Service – Q4 2017 to Q1 2018
2. Developing Asset Management Strategy – Q2/Q3 2018
3. Developing Financial Strategy – Q3/Q4 2018
4. Preparing Detailed Asset Management Plan – Q4 2018

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Questions?

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