



ESSENTIAL
ASSET MANAGEMENT
TOOLS

RDIH

This Presentation Is Adapted From:



Downloadable from:

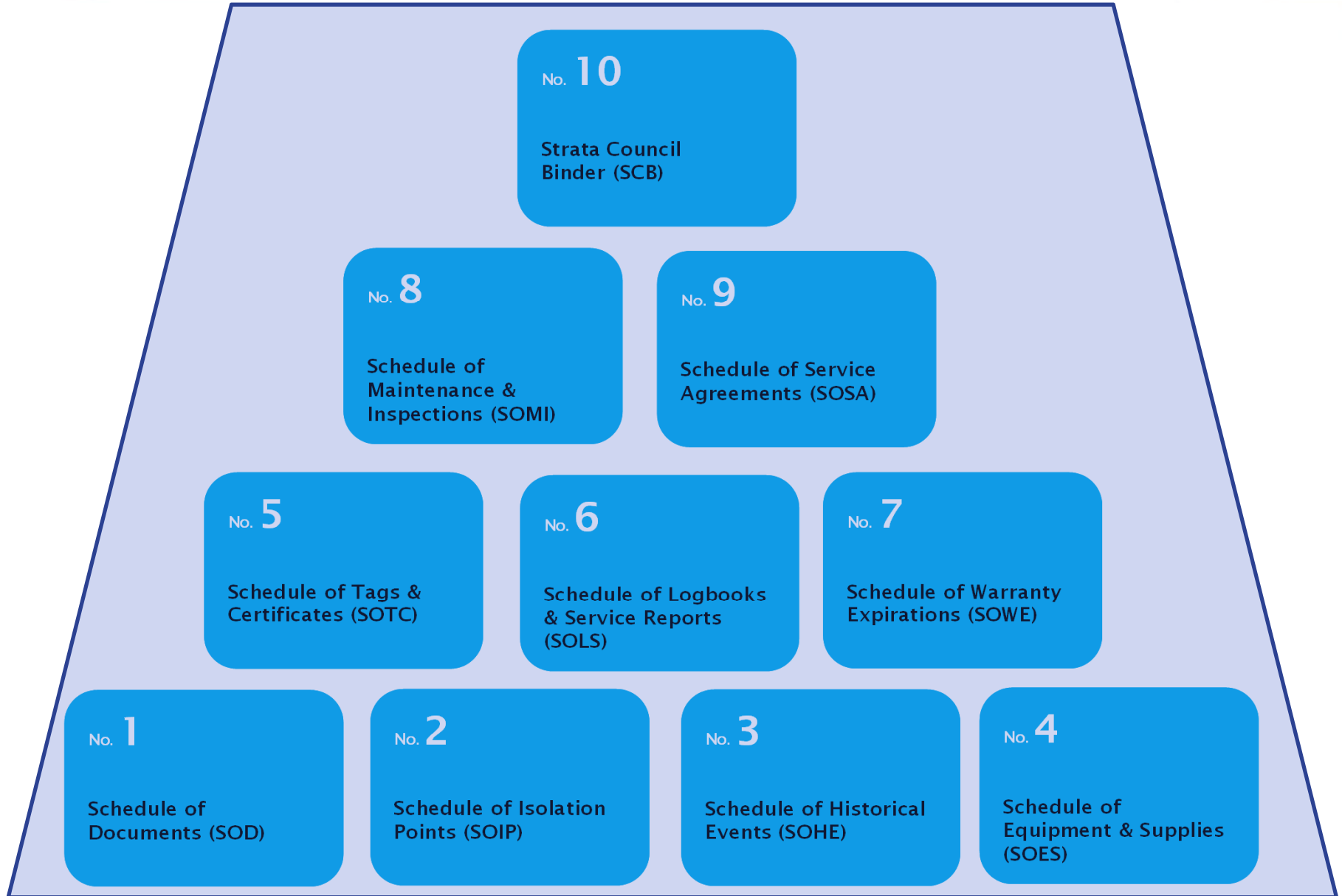
<http://learning.rdh.com/workbook>

A Reminder – What Are You Managing



System	Sample Assets
Enclosure	Roofs, windows, balconies, doors, etc.
Electrical	Electrical distribution, lighting, enterphone, etc.
Mechanical	Plumbing, drainage, ventilation, etc.
Elevator	Elevator machine, cabs, etc.
Fire Safety	Detection, suppression, egress, etc.
Interior Finishes	Flooring, painting, doors, etc.
Amenities	Furnishings, fitness equipment etc.
Sitework	Sanitary & storm sewers, water lines, landscaping, paving, etc.

The Asset Management Tool Box



Every Tool Has A Template In The Workbook



9
Schedule of Service Agreements (SOSA)

No. 1
Schedule of Service Agreements (SOSA) (SODO)

Strata Number: _____
Date: _____

4
Schedule of Equipment & Supplies (SOES)

No. 4
Schedule of Equipment & Supplies (SOES)

A.	Governance	Location of Master Document	Number of Pages	Scanned	Date of issue	Notes	Entered by:
						...ing a review in early 2014	DA

Strata Number: _____
Date: _____

A.	Equipment	Quantity	Storage location	Notes	Entered by:
Example	12 foot ladder	x1	Storage shed	The ladder must be signed out	DA
1					
2					
3					
4					

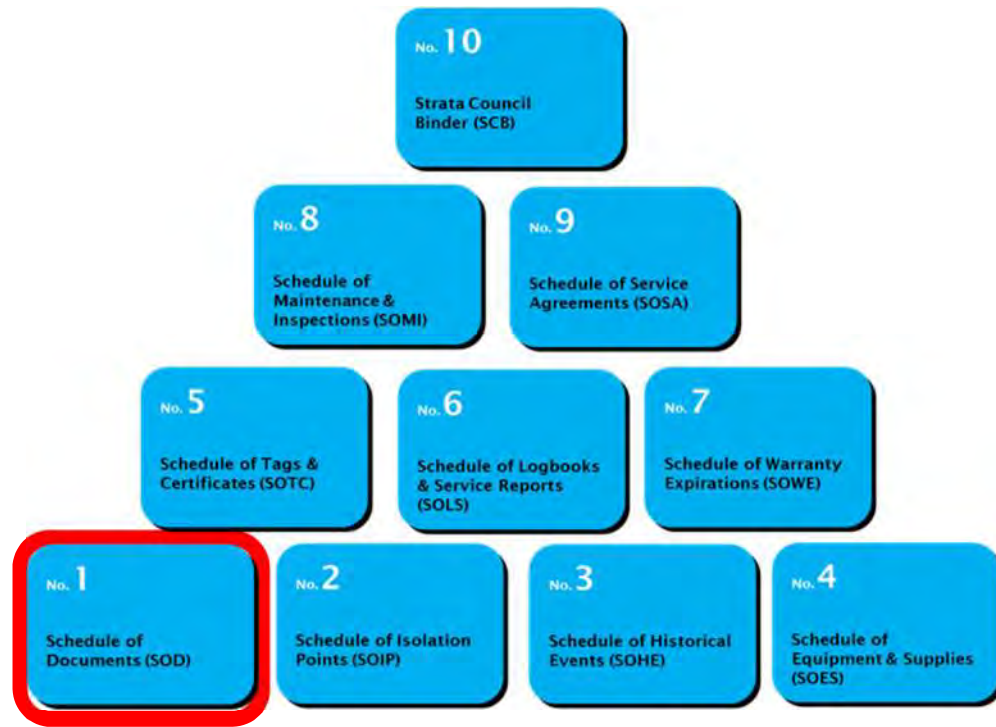
Entered by: _____
drawing A2 is missing
DA

B.	Supplies	Quantity	Storage location	Notes	Entered by:
Example	Fan filters	1 box	Mechanical room	12"x16" filters, non-washable, purchased from ABC Supplies	DA
1					
2					
3					
4					
5					

Entered by: _____

C.	Other	Quantity	Storage location	Notes	Entered by:
1					
2					
3					

Schedule Of Documents (SOD)



Examples Of Governance Documents



Disclosure Statement

DISCLOSURE STATEMENT
FEBRUARY 24, 1995
REAL ESTATE ACT OF BRITISH COLUMBIA

This is a Disclosure Statement with respect to an offering by Molnar Capital III Inc. (the "Developer") for the sale of certain lots located at 2654-2686 West 4th Avenue, Vancouver, British Columbia in a development known as the "Star of Kitaliano" (the "Development").

DEVELOPER

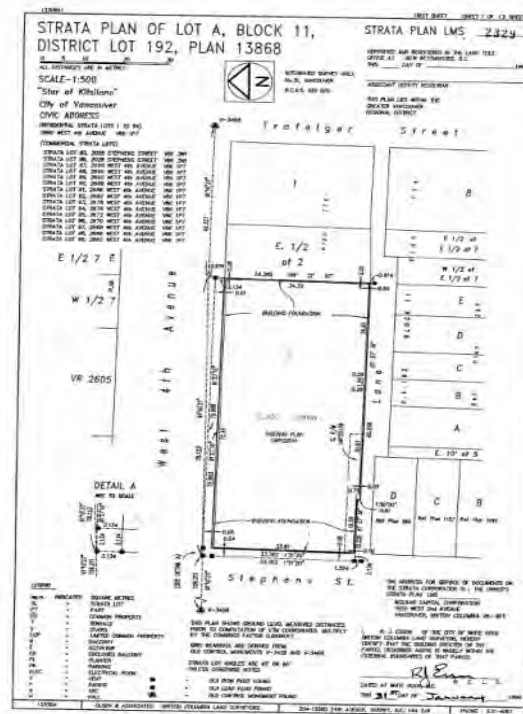
Name:
 Registered Office:
 Mailing Address:

DISCLAIMER

NEITHER THE SUPERINTENDENT OF REAL ESTATE NOR ANY OTHER AUTHORITY OF THE GOVERNMENT OF THE PROVINCE OF BRITISH COLUMBIA HAS IN ANY WAY PASSED ON THE MERITS OF THE MATTERS DEALT WITH IN THIS DISCLOSURE STATEMENT. THIS DISCLOSURE STATEMENT HAS BEEN FILED WITH THE SUPERINTENDENT OF REAL ESTATE, BUT HE HAS NOT DETERMINED WHETHER OR NOT IT COMPLIES WITH PART 2 OF THE REAL ESTATE ACT.

- Developer's intentions
- Caveat emptor for buyer
- 1st year operating budget
- 1st year reserve allocation
- 1st year management company

Strata Plan



- Who owns what?
- How much does each own?

Bylaws

STRATA CORPORATION LMS

Stratford, B.C. 1999 (V.4)

BYLAWS
 Approved September 14, 2011

RULES
 Ratified August 25, 2010

These Bylaws are for the protection of your investment and your living comfort at La Costa Green and can be reviewed at a properly convened General Meeting of the Owners of Strata Corporation LMS 1425.

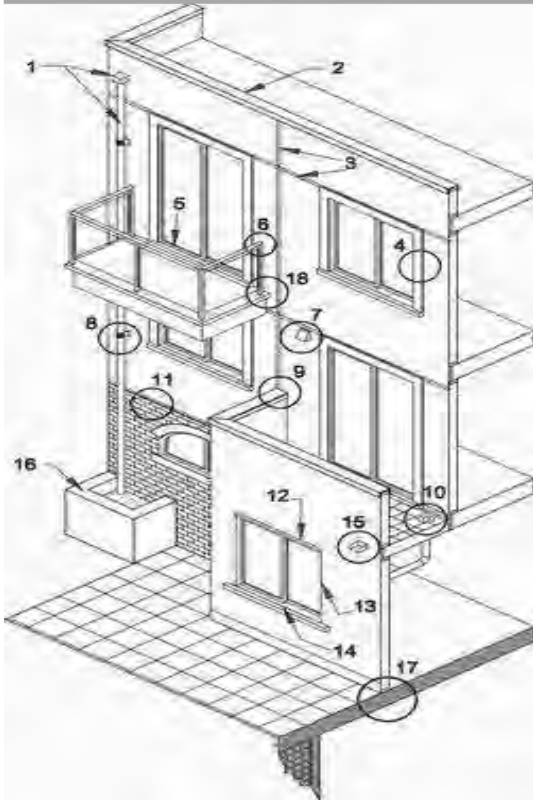
Bylaws to remain with suite when sold

- Strata responsibilities
- Owner responsibilities

Examples Of Technical Documents



Drawings



Architectural, structural, mechanical, electrical, civil, etcetera...

Manufacturer Literature

BELL & GOSSETT®

PARTS LIST
CP-106C-PL

Series 60

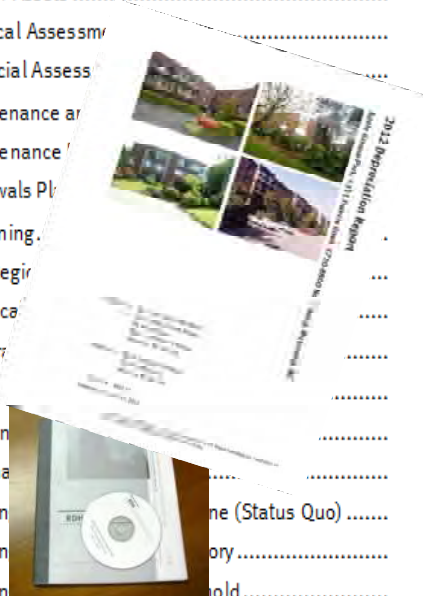
Replacement Parts for
Series 60
Maintenance Free
In-Line Mounted
Centrifugal Pumps

Bell & Gossett®
ITT Industries
Department 101

Pumps, fans, motors, boilers, panelboards, transformers, etcetera...

Consultant Reports

1. Introduction
2. Evaluation of Assets
- 2.2. Physical Assessment
- 2.3. Financial Assessment
3. Major Maintenance and Renewals Planning
- 3.1. Maintenance
- 3.2. Renewals Planning
4. Project Planning
- 4.1. "Strategic"
- 4.2. "Tactical"
- 4.3. "Operational"
- 4.4. Project
5. Funding Scenarios
- 5.1. Alternative
- 5.2. Funding
- 5.3. Funding
- 5.4. Funding
- 5.5. Funding by Individual Owners
6. Recommendations



Warranty reviews, depreciation report, condition assessment, etc...

Examples Of Financial Documents



Operating Budget

Strata Plan
Coopers
Approved Budget
Effective August 1, 2012 to July 31, 2013

Income		
Operating Income	3000-0000	343,015.00
Contingency Reserve Income	3010-0000	34,301.00
Interest Income	3030-0000	400.00
		<u>377,716.00</u>
Expense		
Agent Fee	4000-0000	36,506.40
Legal/Consulting Fees	4010-0000	10,050.00
Photocopying/Postage	4012-0000	2,875.00
Mgmt Office Supplies & Expenses	4013-0000	1,000.00
Bank Charges	4015-0000	216.00
Insurance	4040-0000	65,635.00
Electricity	4050-0000	4,500.00
Water & Sewer	4052-0000	79,000.00
Garbage Collection	4056-0000	34,000.00
Repairs & Maintenance - (General)	4160-0000	15,559.20
Supplies	4217-0000	300.00
Window Cleaning	4220-0000	3,000.00
Pest Control	4222-0000	5,000.00
Gutter Cleaning	4223-0000	7,900.00
Dryer Vent Cleaning	4225-0000	1,800.00
Janitorial	4232-0000	720.00
Landscaping	4300-0000	69,353.40
Landscaping Improvement/Planting	4300-0020	3,000.00
Snow Removal	4310-0000	2,000.00
Irrigation System	4315-0000	1,000.00
		<u>343,415.00</u>
Surplus (deficit) from operations		
Contingency Reserve Transfer	4800-0000	34,301.00
		<u>34,301.00</u>
Total operating surplus (deficit)		<u>0.00</u>

Income and expenses

Balance Sheet

Balance Sheet (Accrual)
February 2012

Assets		
Current Assets		
Cash		
Bank - Operating Account		158,477.67
Bank - Contingency Reserve		250,005.24
Bank - Other Reserves		65,458.40
Total Cash		<u>473,941.31</u>
Accounts Receivable		21,736.92
Accounts Receivable - Others		353.85
Due From / (To) Developer		669.44
Total Current Assets		<u>496,701.52</u>
Fixed Assets		
Caretaker's Suite		322,568.35
Total Fixed Asset		<u>322,568.35</u>
Total Assets		<u>819,269.87</u>
Liabilities & Equity		
Liabilities		
Accounts Payable		63,738.76
Accrued Payable		52,685.60
Prepayment - Revenue		4,514.48
Security Deposit Received		450.00
1st Mortgage		225,468.75
2nd Mortgage		76,920.95
Total Liabilities		<u>423,878.54</u>
Equity		
Caretaker's Suite Equity		20,176.55
Operating Surplus(Deficit)		59,749.04
Contingency Fund Balance		250,005.24
Reserve-Mortgage		65,458.40
Total Equity		<u>395,391.33</u>
Total Liabilities & Equity		<u>819,269.87</u>

Assets and liabilities

Insurance Certificate

COASTAL INSURANCE SERVICES LTD.

100 - 118 Street, Fort St. John, BC V9J 1R7 Tel: 663-1717 Fax: 663-1517
122 Avenue Road, White Rock, BC V9B 3E2 Tel: 666-2111 (Ext) Fax: 666-2111 (Ext)
1140 Street, 100-400-2100 Neww. www.coastalinsurance.com © 2008 Coastal Insurance Services Ltd.

DECLARATIONS

Policy No: CSW 2676

Name of Insured: The Owners of Strata Plan 990-252-Culver Bay
Location Address: 7441, 7437, 7435, 7437 & 7439 Metcal, Richmond, BC V6Y 1E2
Additional Named Insured: The Whistler Group, 815 - 1290 West Third Avenue, Vancouver, BC V6P 6Z5
Policy Period: 12/31/11 to 12/31/13 (Monthly) (2) in a Standard Term
Loss Payable to: The Insured or Order as Accredited with the Strata Property Act of British Columbia.
Insurer: As Per List of Participating Insurers Attached
Insured is provided subject to the Declarations, Terms, Conditions, Limitations and Endorsements of this policy and only for those coverages for which specific limits or amounts of insurance are shown on this Declaration Page.

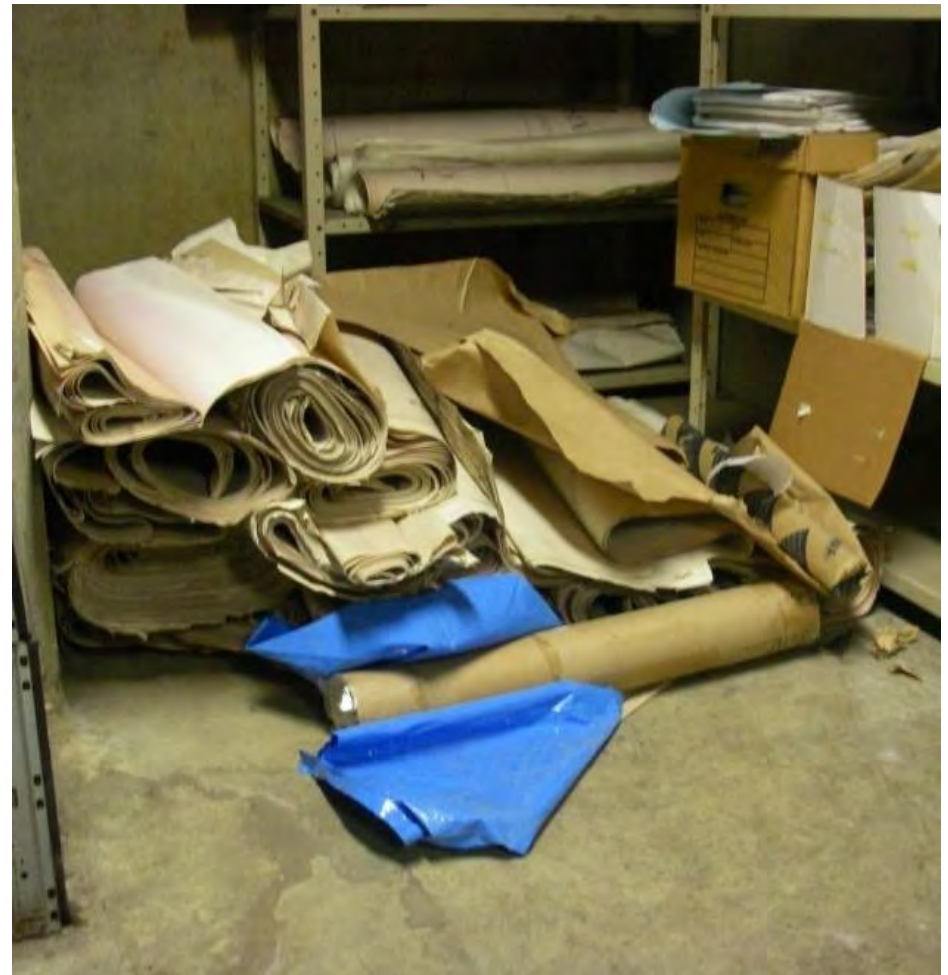
INSURANCE AGREEMENTS	Deductible (if)	Limit (if)
PROPERTY - (FFS) (Auto)		
All Property, All Risks, Unassumed Replacement Cost, Bylaws	2,000	27,000,000
Water Damage	25,000	Included
Backup of Sinks, Stoves, Sepsis Tanks or Dishes	25,000	Included
Explosion & Damage	15%	Included
Food Storage	25,000	Included
Ice & Leak Replacements	25%	10,000
BLANKET EXTERIOR CLASS - (Form C288900200)	Residential	100
COMMERCIAL GENERAL LIABILITY - (Form 00002 - 10/01/01)		
Coverage A - Public, Auto & Property Damage Liability - Per Occurrence	500	10,000,000
General Aggregate Limit		10,000,000
Products & Completed Operations - Per Occurrence	500	10,000,000
General Aggregate Limit		10,000,000
Coverage B - Personal & Advertising Injury Liability - Per Occurrence	500	10,000,000
General Aggregate Limit - Aggregate		10,000,000
Coverage C - Medical Payments - Per Occurrence		10,000
Medical Payments - Per Occurrence		25,000
Coverage D - Transit Legal Liability	500	500,000
Non-Owned Automobile - (FFS) (Form E29002 - 02 - Per Occurrence)		10,000,000
Contractual Liability - (FFS) (Form F25150 - 03 - Per Occurrence)		10,000,000
Building & org. Tools Leased Vehicle - (S.E.P. Per 90 From 12/31/01) - 02 - Per Occurrence		10,000,000
Automobile - Automobile Exclusion - From 12/31/04 - 01 - Aggregate		Included
Liquid Pollution Liability Coverage - From 06/01/11 - 02 - Aggregate		1,000,000
Employee Benefit Liability - Form 000206 - 05 - Aggregate	1,000	1,000,000
DIRT TOES & OFFICERS LIABILITY - (Form 00020 - 02/01)		5,000,000
Contaminant Determination Order Cost - Per Occurrence		10,000
Aggregate		15,000
POLLUTION & REMEDIATION LEGAL LIABILITY - (Form 01111 - 04/01/01/01/01)		10,000 (Residual)
Limit of Liability - High Limit, Remediation Expense or Legal Defense Expense		1,000,000
VOLENTIER ACCIDENT - (Form 4 - 02/21/04) (02/01) - (Per 1)		
Principal Seat - \$100,000 Weekly Accident Indemnity - \$500 (maximum 21 weeks)		7 Day Waiting Period
Accident Excludes - (Excludes as in 01/01/01) see policy and/or General Exclusions - 02/01/01		
COMPREHENSIVE DISHONESTY, DISAPPEARANCE AND DESTRUCTION		
Form 00000 (01/01/01)		
I - Employee Dishonesty - Part A		10,000
II - Loss Inside the Premises		5,000
III - Loss Outside the Premises		5,000
IV - Money Order and Certified Paper Covered		5,000
V - Deception Program		5,000
FORMS BREAKDOWNS		
I - Physical Damage, Utensil Damage, Standard Contaminants Plus Replacement Cost - Form C7000004 (01/11)	1,000	27,000,000
II - Commercial Package, 90% Co-Insurance - Form C7000123 (11/11)	1,000	15,000
III - Extra Expense - Form C700014 (01/11)		10,000,000
IV - Outdoor Payout - 90 Days - Form C700014 (01/11)		10,000

****ALL COVERAGES SUBJECT TO POLICY DEFINITIONS****
This Policy contains a clause(s) which may limit the amount payable.
This policy shall not be valid or binding unless countersigned by a duly Authorized Representative of the Insurer.

[Signature]
President
Coastal Insurance Services Ltd.

Coverages and deductibles

How To Store Documents - This Is Wrong...



How To Store Documents – This Is Right

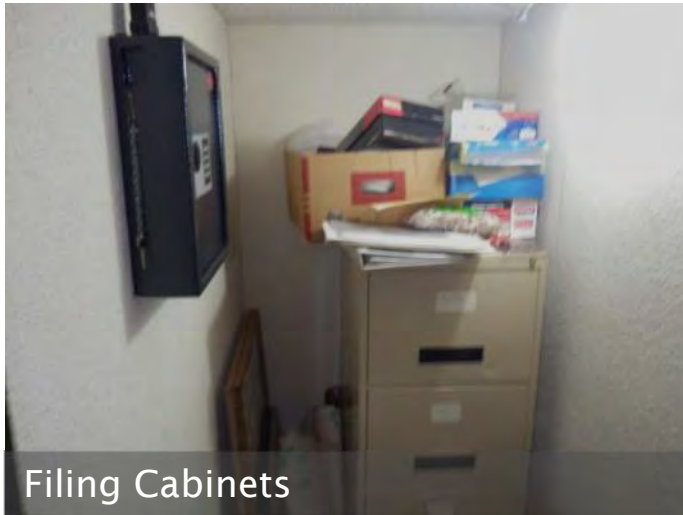


Hardcopy Documents



Digitized/Electronic Documents

How To Store Documents – This Is Right



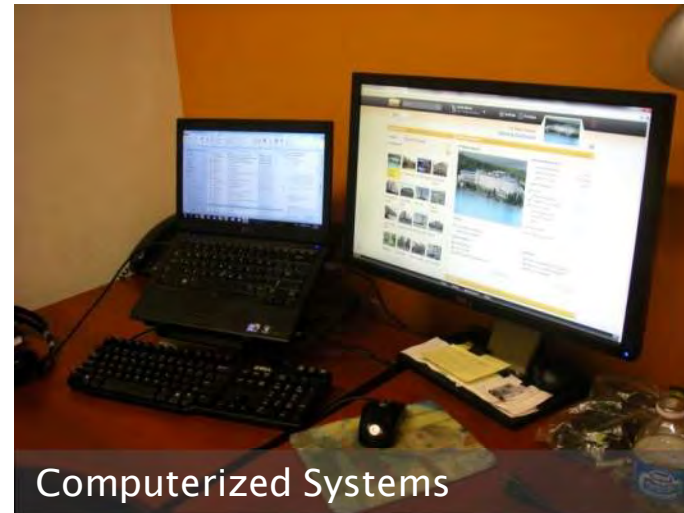
Filing Cabinets



Binders



Bookshelves



Computerized Systems

Why Do You Need A SOD..?



→ Stewardship

- If we cannot manage our documents we cannot manage our physical assets.
- Our documents are also an “asset” – they are an intellectual asset.

→ Liability

- Strata corporations need documents for responsible stewardship.
- When something goes wrong, the first thing people look for are the documents.
- The average strata corporation has 1,000+ pages of reference documents handed over after construction. Or at least is should have.

→ Cost Effectiveness

- It is very expensive to replace missing or damaged documents. Unfortunately, some documents can never be replaced.

→ Efficient Operations

- The Schedule of Documents is like the Table of Contents at the front of a book and the index at the back of a book.

Template For A SOD



No. 1

Schedule of Documents (SOD)

Strata Number: _____

Date: _____

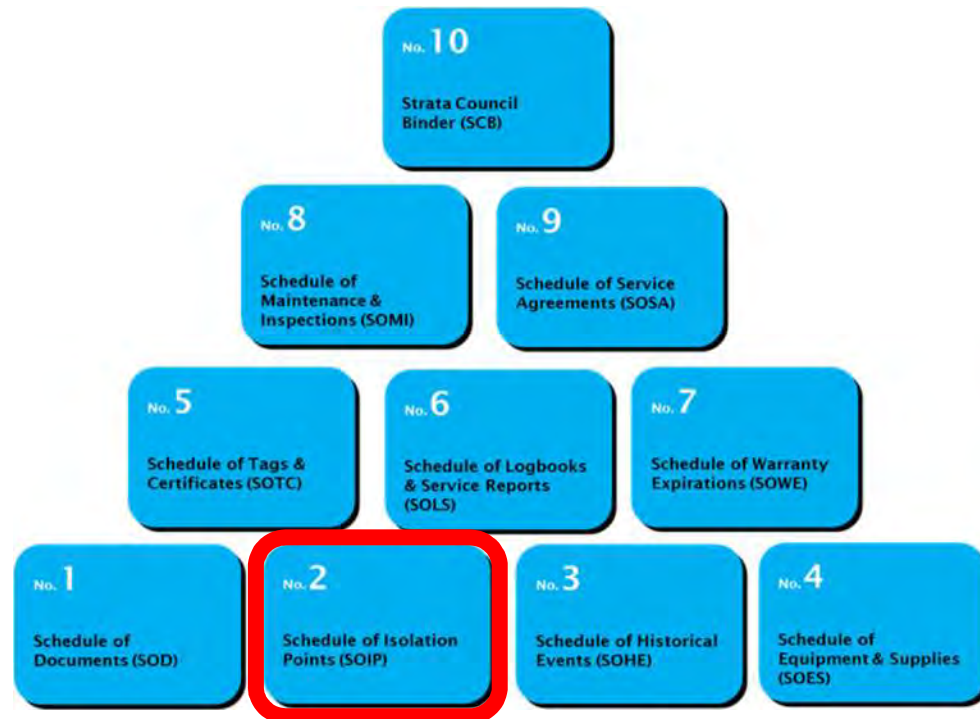
B.	Technical Documents	Location of Master Copy	Number of Pages	Scanned	Date of issue
<i>Example</i>	<i>Drawings, arch.</i>	<i>Council meeting room</i>	<i>12</i>	<i>no</i>	<i>1991</i>

1	Drawings, architectural				
2	Drawings, structural				
3	Drawings, electrical				
4	Drawings, mechanical				
5	Drawings, plumbing				

4	Drawings, mechanical				
5	Drawings, plumbing				
6	Drawings, other				
7	Investigation				

C.	Financial Documents	Location of Master Copy	Number of Pages	Scanned	Date of issue	Notes	Entered by:
1	Operating budget						

Schedule Of Isolation Points (SOIP)



What Is An Isolation Point..?

→ Anything that shuts off the flow of fluids, gases, or electrical.



Domestic Water Valves



Electricity



Irrigation Sprinkler Valves



Fire Sprinkler Valves



Steam Valves



Gas Regulators

Why Do You Need A SOHI - Here's A Short Story... RDH

- A pipe burst in one of the suites.
- Water was flooding into the suite and running down into the floors below.
- Owners were in a panic. Nobody knew how or where to turn off the water.
- When they finally found the valve, it was seized. It would not fully close as it had not been maintained for over 20 years.
- Water flooded into the suites below and into the elevator shaft.
- Many, many thousands of dollars of damage could have been prevented had there been a valve chart in the building.

Why Is A SOIP Important..?

→ **Safety:**

- Some equipment cannot be safely worked on without shutdown.
- For example: de-energized service of an electrical sub-station.

→ **Emergencies:**

- Expedient shutdowns are necessary to limit collateral damage.
- Example: water escape from a burst pipe.

→ **Maintenance:**

- Some equipment must be shutdown on a seasonal basis.
- Example: hose bib winterization every year.
- Winterization of our irrigation sprinkler system.
- Maintenance - we need to shut off equipment to purge, flush and scope.

→ **Repairs & Renewals:**

- Isolation of equipment is necessary for repairs and renewals.
- Repairs - we need to shut things off to fix them.

This Is An Example Of How To Do It Right...

Framed
in glass



Mounted on
the wall in a
conspicuous
location

Template For A SOIP

No. 2

Schedule of Isolation Points (SOIP)

A. Domestic Water		Location	Notes
Example	Main shut off valve	P1 mech room beside stall #15	The door to th

1	Main water shut off valve		
2	Irrigation sprinkler		
3	Hosebibbs		This is essenti
4	Valve chart		
5			

B. Irrigation Water		Location(s)	Notes
1	Main shut off valve		
2	Zone controller		
3			

C. Electricity		Location(s)	Notes
1	Main disconnect switch		Must call BCH
2	Single line diagram		
3	Pad mounted transformer		
4	Distribution transformers		

D. Gas		Location	Notes
1	Main shutoff		Must call Ter
2	Gas regulators		

A. Domestic Water

Example	Main shut off valve
---------	---------------------

1	Main water shut off valve
2	Irrigation sprinkler
3	Hosebibbs
4	Valve chart
5	

Entered by:
DA

B. Irrigation Water

1	Main shut off valve
2	Zone controller
3	

Entered by:

C. Electricity

1	Main disconnect switch
2	Single line diagram
3	Pad mounted transformer
4	Distribution transformers

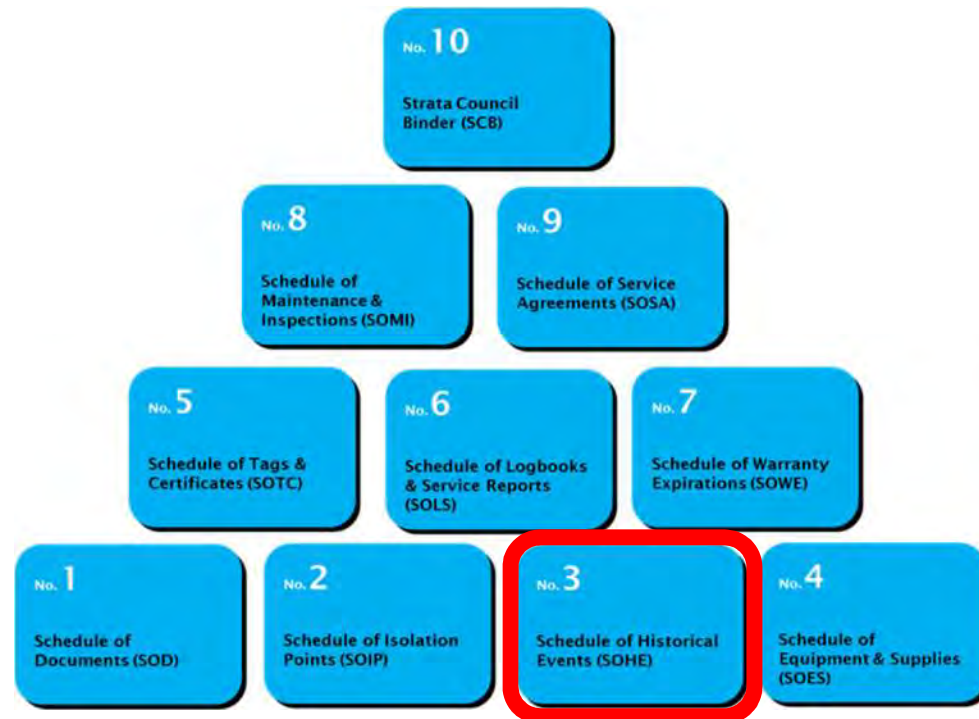
Entered by:

D. Gas

1	Main shutoff
2	Gas regulators

Entered by:

Schedule Of Historical Events (SOHE)



- A brief itemized summary of historical events.
- The summary can be organized by date, location, system, etc.
- Examples of historical events:
 - Large projects (eg. roof replacement).
 - Insurance losses (eg., flood at unit 307).
 - New bylaws (eg., patio/balcony alterations).
 - Warranty claims.

→ **Your Identity**

- Every strata has a corporate memory that needs to be preserved.
- A strata without a memory is a strata without knowledge.

→ **Transient Ownership**

- Councils change every year.
- Property managers change.

→ **Your Future**

- Where you have been is just as important as where you are going.
- History has a tendency to repeat itself.

Where Can You Find Historical Information..?



- Minutes of council meetings.
- Minutes of general meeting.
- Insurance claim histories.
- General ledger printouts.
- Original owners and knowledgeable owners.
- Former council members.
- Former committee members.

An Example From A Strata Corporation...



2009-05-12 CHANGE FILTERS ROOF	2012-08-04 FILTERS ON ROOF
7/16/09 FIKT POOF	2012-08-04 DRIVE IN SEALED
2009-08-17 CLEANED BOILER RM FRESH AIR INTAKE VENT	2012-08-04 NEW VALVES IN SPRINKLER RM
2009-08-23 CHANGE FILTERS ON ROOF	2012-09-04 FILTERS ON ROOF
2009-11-17 2 NEW SUMP PUMPS	FILTERS ON ROOF
2009-12-23 ALL LOWER DRAINS CLEANED/EMPTIED	2012-11-07
2010-03-02 UPPER P MOVED DOWN LOWER	UPPER "P" WASHED 2013-02-20
2010-03-04 FRONT ENT. POWER WASHED	LOWER "P" WASHED 2013-02-21
*2010-03-18 NEW ROOF DOOR HARDWARE	2013-05-28 NEW FILTERS ON ROOF
2010-05-10 FILTERS ON ROOF	2012-12 NEW EMERGENCY EXIT SIGNS
2010-05-12 SNAKE FROM RF 103/306/315 105/307 316	PAINT CEILING ON 4 FL NEW EXIT "X" 2013-03
2010-07-06 NEW FILTERS	2013-04-16 HALLWAY NEW SHUTOFF VALVES #1-2+4
2010-10-02 NEW FILTERS	2013-07-21 FILTERS ON ROOF

Another Example From A Strata Corporation...

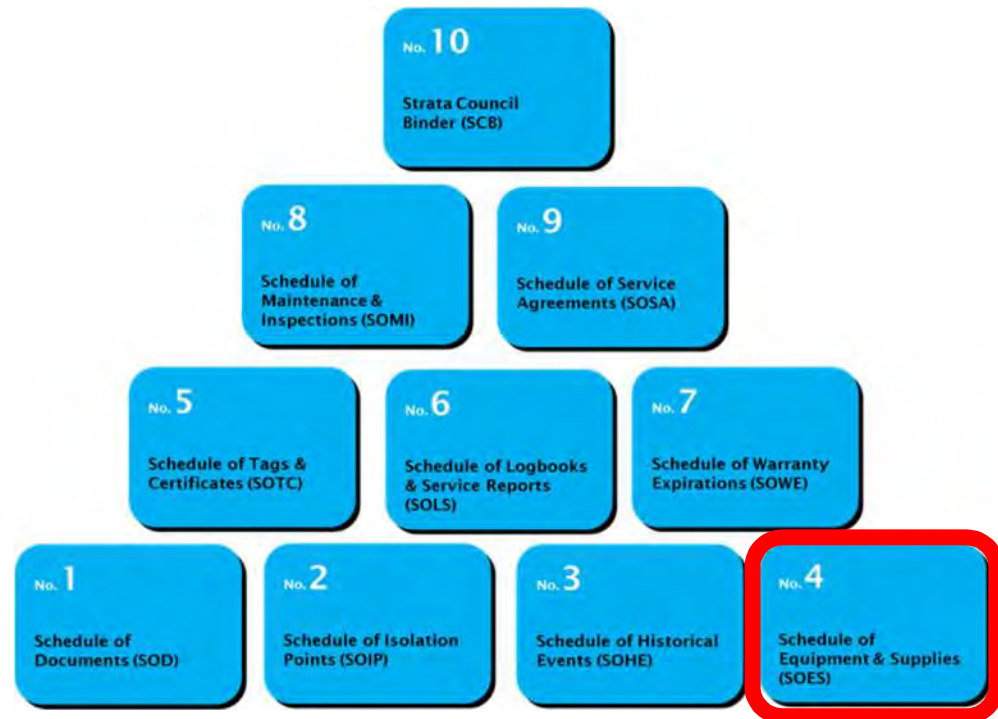


Summary of Completed Projects – Listed by System	
Enclosure System	Fire System
→ Injection crack repairs at the underside of the parkade (pre-2007)	→ Retrofitted fire alarm panel (2010/2011)
→ Replaced sloped asphalt shingle roofs (2006)	→ Replaced deficient alarm bell and smoke detectors (2011)
→ Replaced low-slope SBS roofs (2006)	

- Injection crack repairs at the underside of the parkade (pre-2007)
- Replaced sloped asphalt shingle roofs (2006)
- Replaced low-slope SBS roofs (2006)
- Replaced gutters and rainwater leaders (2010)
- Rehabilitation of building envelope (2010)

→ Hydro flushing of horizontal drain lines (every 2 years)	→ Repainted interior common area walls (2011)
	→ Installed new fire lane signage (2011)
	→ Installed security hardware on common area doors
Electrical System	Sitework
→ Installed software upgrade to <u>enterphone</u> panel (2009)	→ Improvements to soft landscaping coordinated building enclosure renewal (2010)

Schedule Of Equipment & Supplies (SOES)



Examples Of Strata Stock Rooms



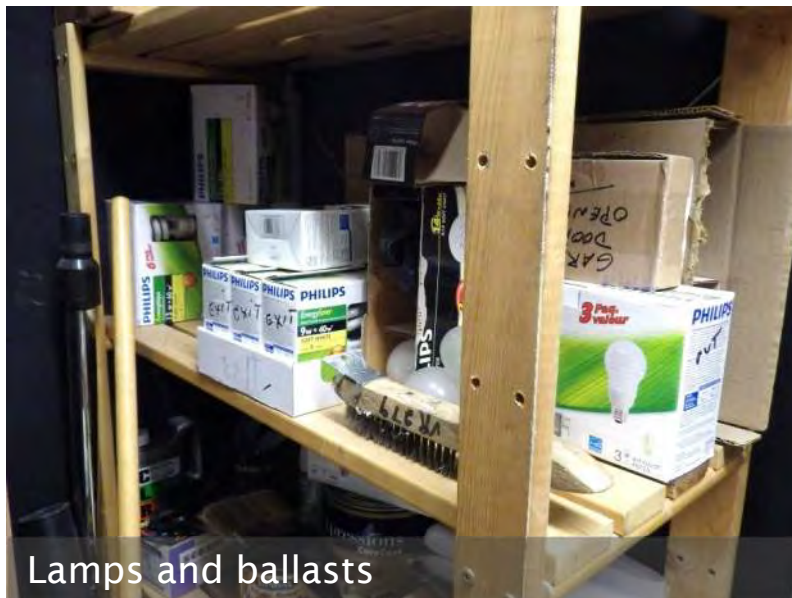
Types Of Maintenance Supplies



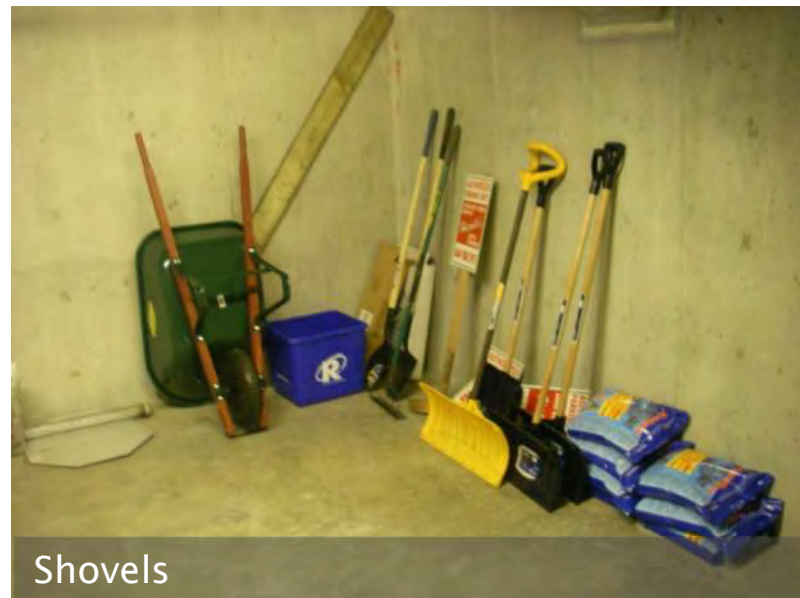
Painting supplies



Floor polisher



Lamps and ballasts



Shovels

Why Is A SOES Important..?



→ **Save Money**

- Avoid the last minute premiums charged by contractors when emergency repairs are carried out.
- Buy products in quantity to get reduced pricing.

→ **Emergency Preparedness**

- Having salt for safety purposes during the winter to avoid slip and fall claims.

→ **Obsolescence Management**

- Matching dye lots for aesthetic assets such as tiles and carpets.

→ **Safety**

- Burnt out lamp in a stairwell poses a safety hazard.

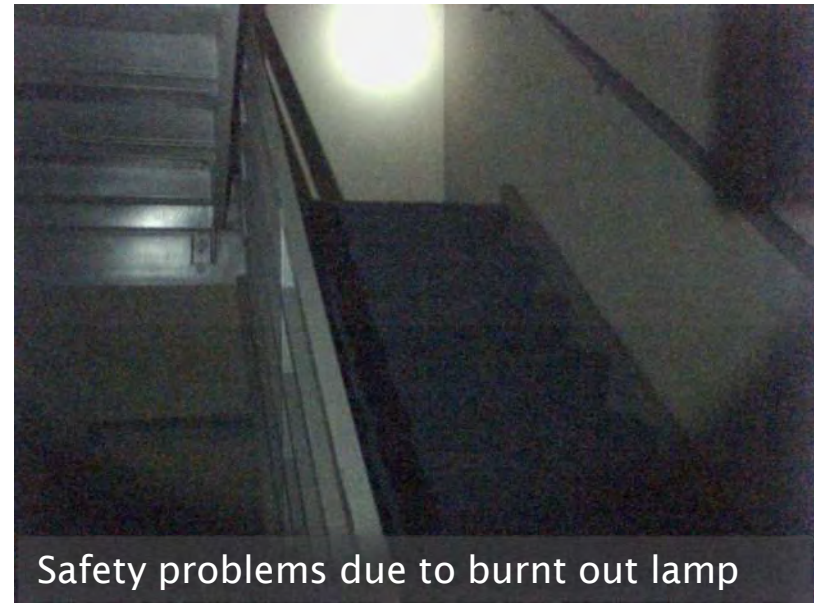
→ **Efficient Access**

- Efficient and safe access to assets.

The Importance Of Equipment And Supplies



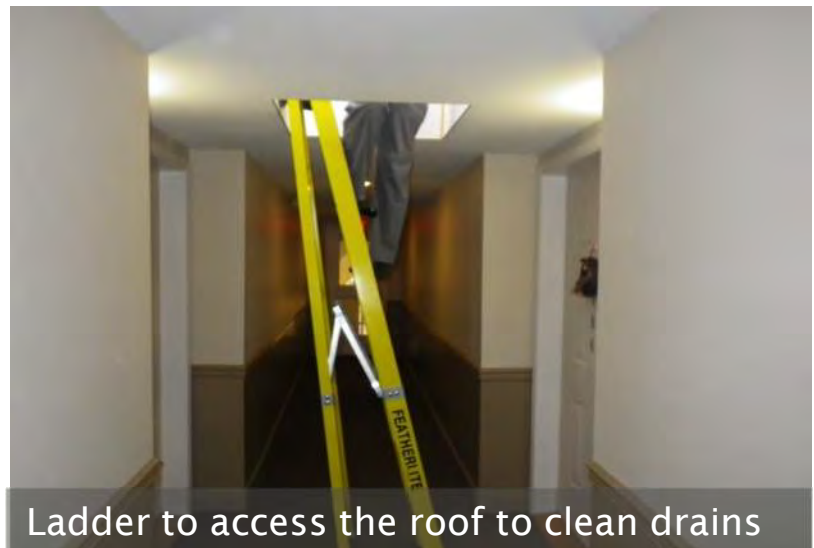
Avoidance of slip and fall hazards



Safety problems due to burnt out lamp



Matching pieces of carpet for repairs



Ladder to access the roof to clean drains

Example Of A Strata Sign Out Sheet

Fence Painting Project Materials Sign Out Sheet

Date	Unit #	Name/ Signature	# Gallons	Brushes Yes / No	Approx amount Returned (paint/brushes)	Signature project Coordinator
		(COMMON)				
Aug 7 10	7	ARCH AT ENJOINT	2	1		PA
Aug 11	25	Kathryn Bratchak				
Aug 11	19		2	1		PA
Aug 13	67	DEREK	1	1		PA
Aug 13	51		1	2		PA
Aug 16	43	ALFRED	1	1		PA
Aug 21	66	GREG	2	-	-	PA
Aug 23	28	JUSTIN	2	2		PA
Aug 24	2		2	1		PA
Aug 24	17	LORETA	1	1		PA
Aug 24	26	JASON	1	1		PA
Aug 24	21	Neil Brown	1	1		

Example Of A Strata Key Log

Common area key list.

- # 1. 1st floor electrical / meter / Telephone room
- # 2. 1st floor E. side door alarm.
- # 3. Upper parkade electrical / timer room.
- # 4. Boiler room.
- # 5. Sprinkler room.
- # 6. Elevator room.
- # 7. File room / office.
- # 8. Mail box key.
- # 9. Laundry coin drawers.
- # 10. Strata locker.
- # 11. Garbage padlock.
- # 12. Garage side door.
- # 13. The two locks on the enterphone.
- # 14. Elevator key.
- # 15. Fire extinguishers boxes in hallways.
- # 16. Alarm panel.
- # 17. Filing cabinet.
- # 18. Lock on sprinkler valve.
- # 19. Gate on the E. side.
- # 20. Pass key for # 1, 3, 4, 5 and 6.
- # 21. Padlocks on roof hatches

Building keys, front entrance: cylinder replaced on 2009 11 24
Roof hatches and 4th fl hardware installed on 2010 03 24
Old key # 95
New keys # 103 to 212 inc.

Template For A SOES



No. 4

Schedule of Equipment & Supplies (SOES)

Strata Number: _____

Date: _____

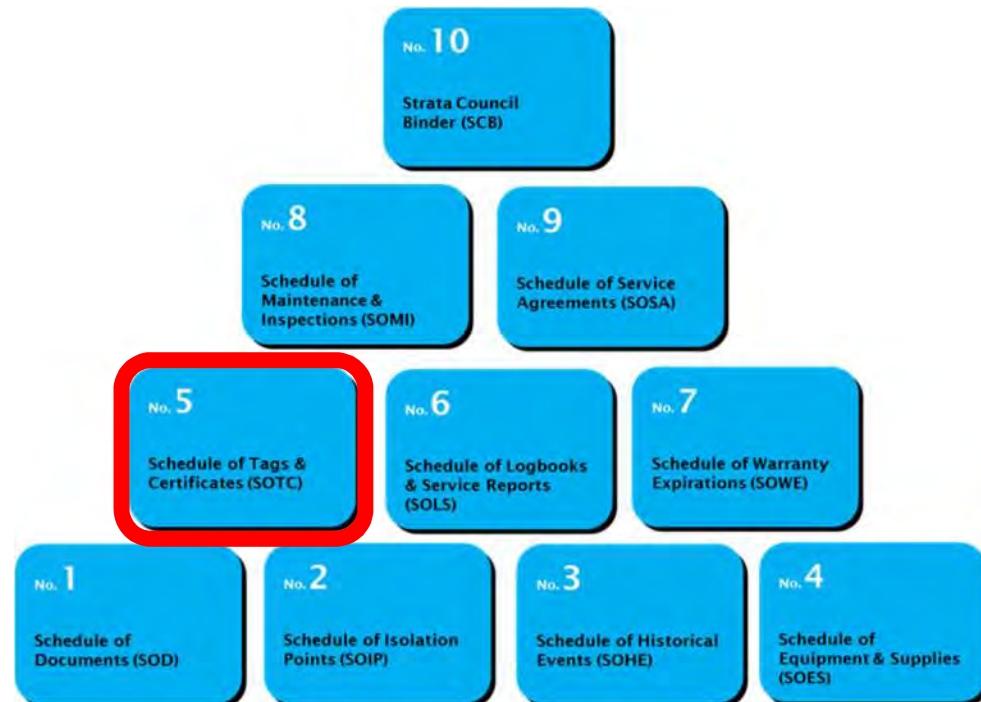
A.	Equipment	Quantity	Storage location	Notes	Entered by:
<i>Example</i>	<i>12 foot ladder</i>	<i>x1</i>	<i>Storage shed</i>	<i>The ladder must be signed out</i>	<i>DA</i>

B.	Supplies	Quantity	Storage location	Notes
<i>Example</i>	<i>Fan filters</i>	<i>1 box</i>	<i>Mechanical room</i>	<i>12"x16" filters, no</i>
1				
2				
3				

5				
---	--	--	--	--

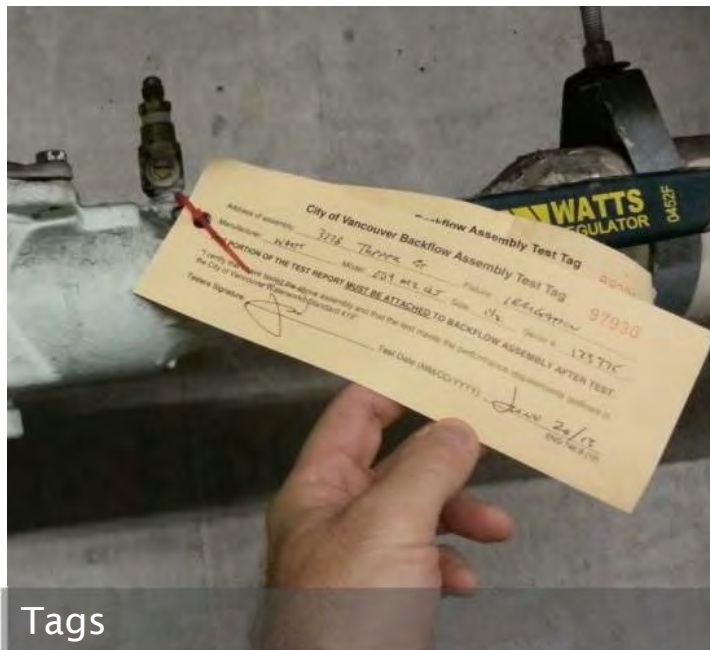
C.	Other	Quantity	Storage location	Notes	Entered by:
1					
2					
3					

Schedule Of Tags And Certificates (SOTC)

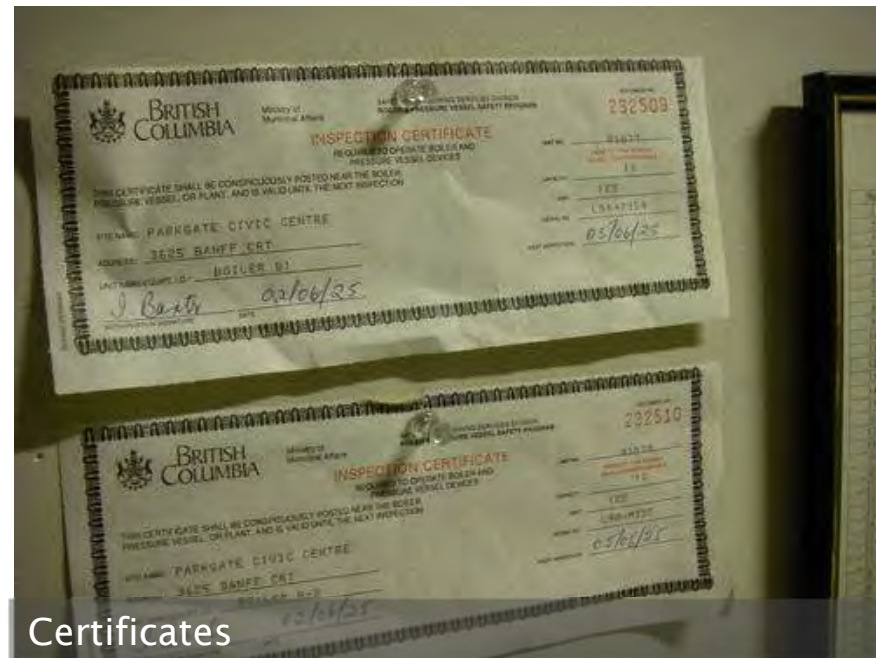


What Are Tags And Certificates..?

- Pieces of paper and labels, such as licences, that are attached to certain critical assets or located near the assets.
- Some tags and certificates cannot be kept at the management office. They must be on site.

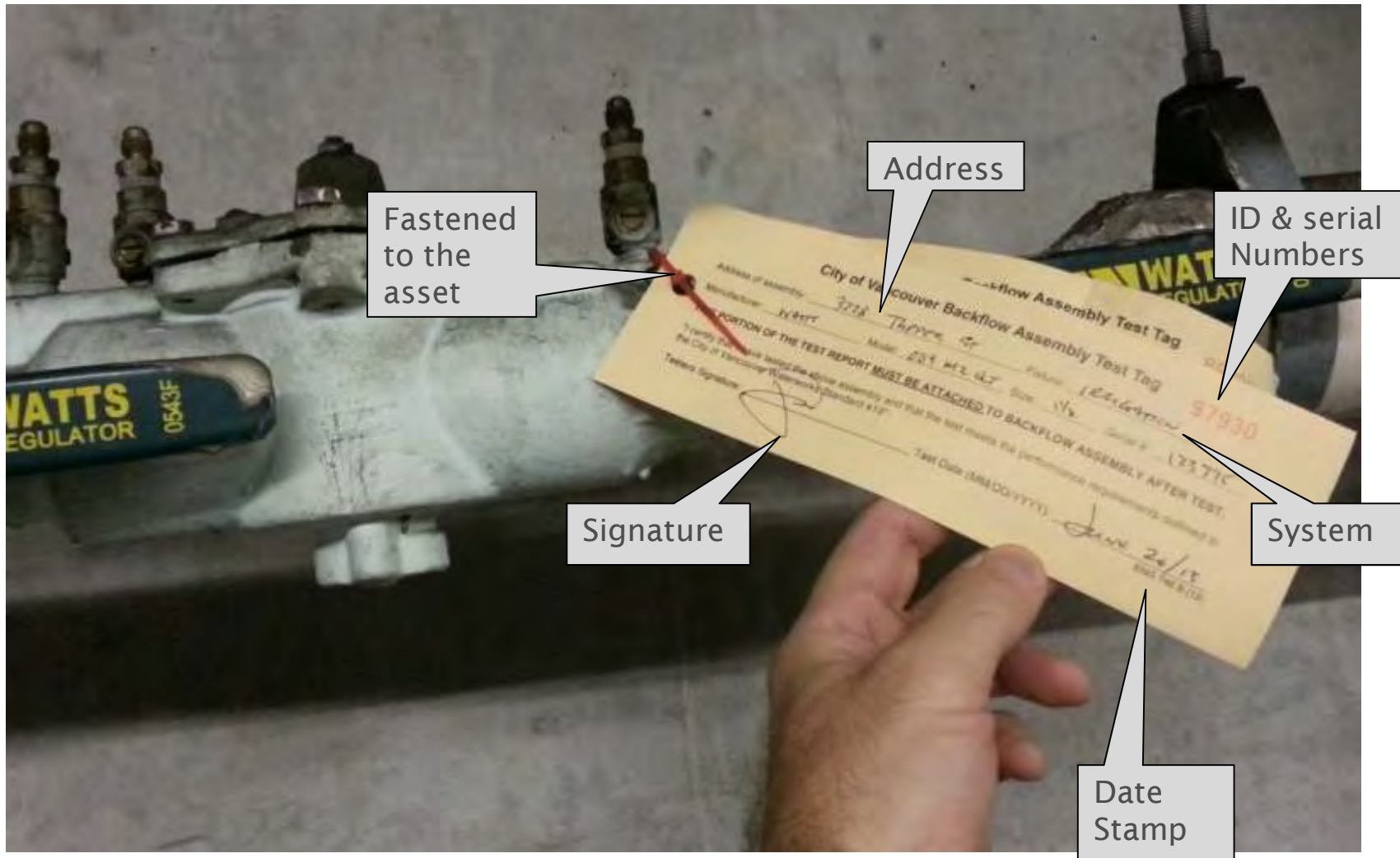


Tags

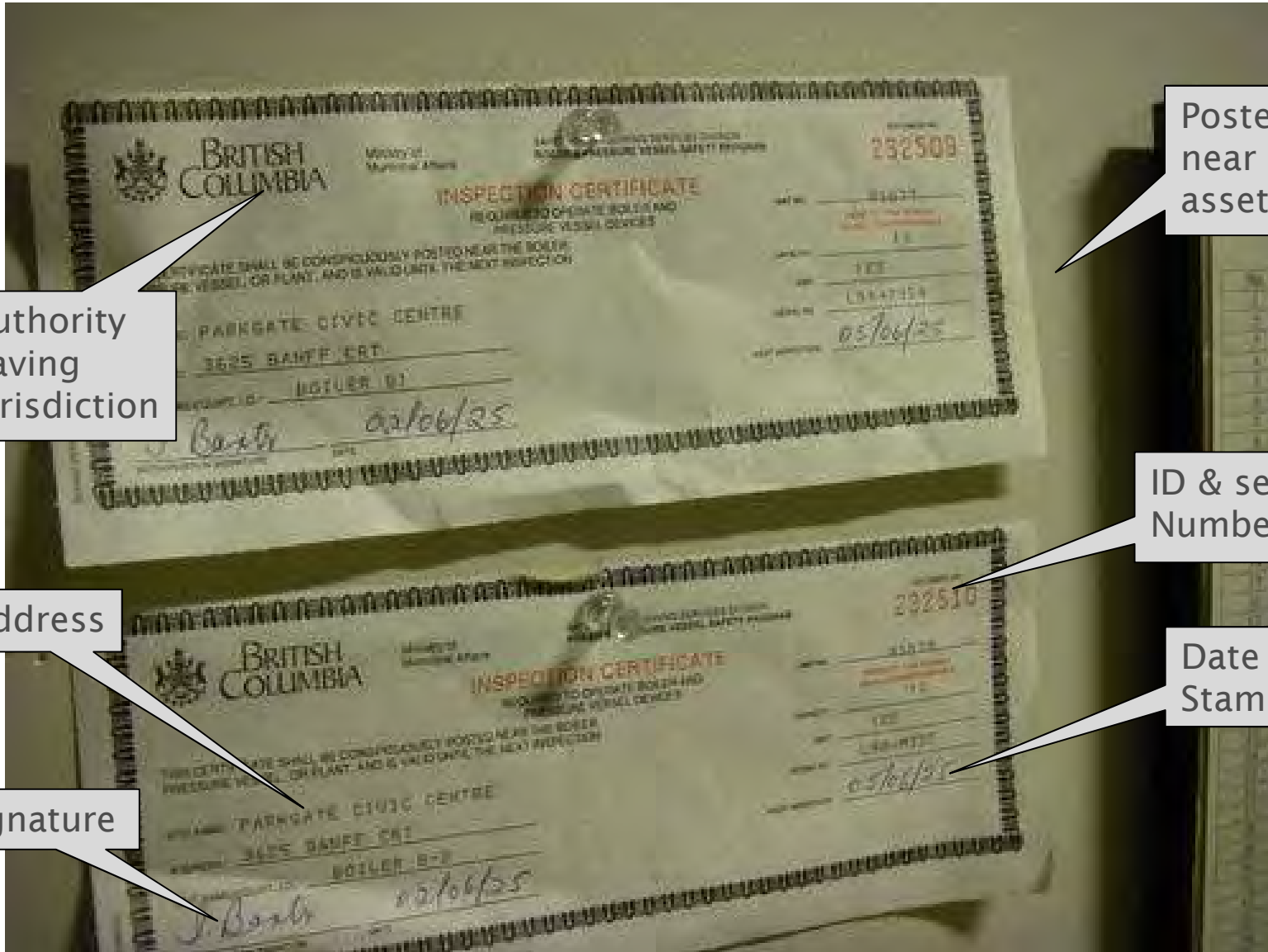


Certificates

Elements Of A Tag



Elements Of A Certificate



Authority having jurisdiction

Posted near the asset

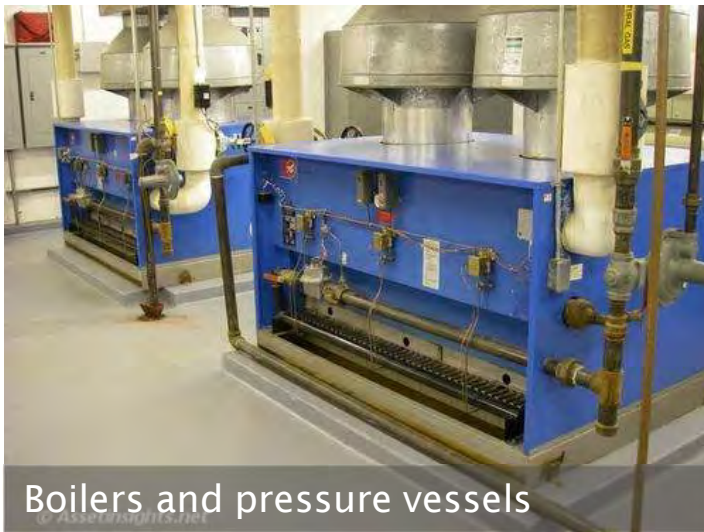
ID & serial Numbers

Address

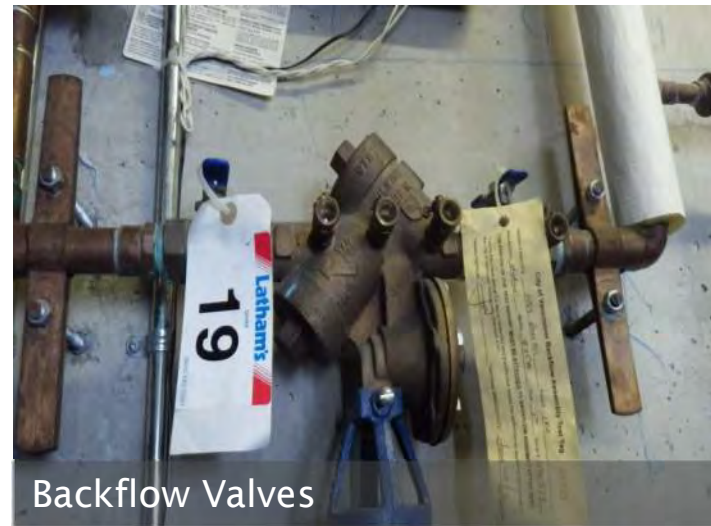
Date Stamp

Signature

Examples Of Assets That Require Certificates



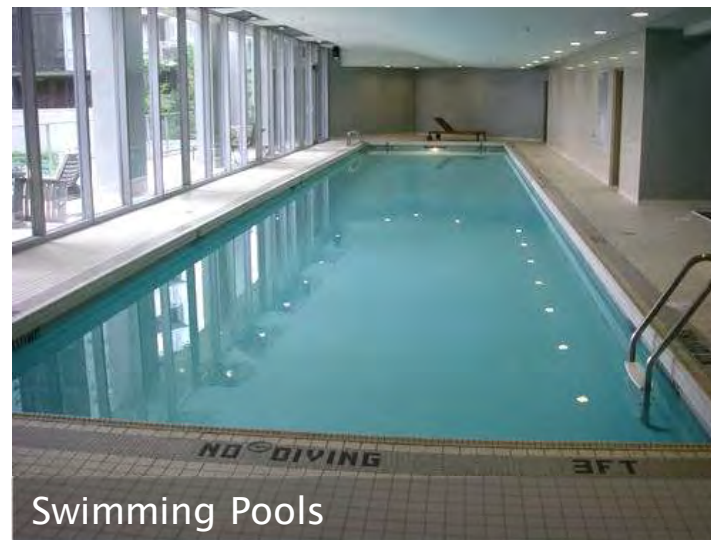
Boilers and pressure vessels



Backflow Valves



Elevators

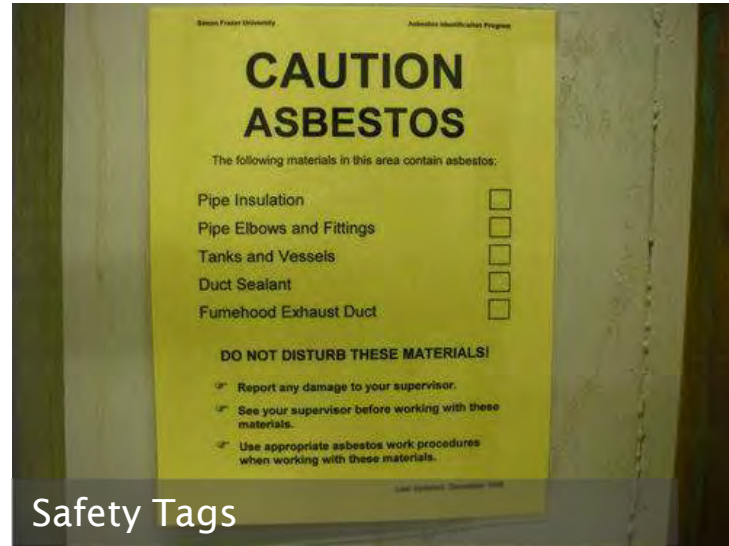


Swimming Pools

Four Types Of Tags On Equipment



Identification Tags



Safety Tags



Test Tags



Instruction Tags

Why Is SOTC important..?



→ Risk Management

- It is a mandatory requirement of safety codes (elevators, boilers, etc).
- The strata could be penalized if the tags/certificates are not visible.
- The insurance providers have an expectation when underwriting the strata insurance policy.

→ Accountability

- We need to know which company has tested our assets, when it was done, etc.

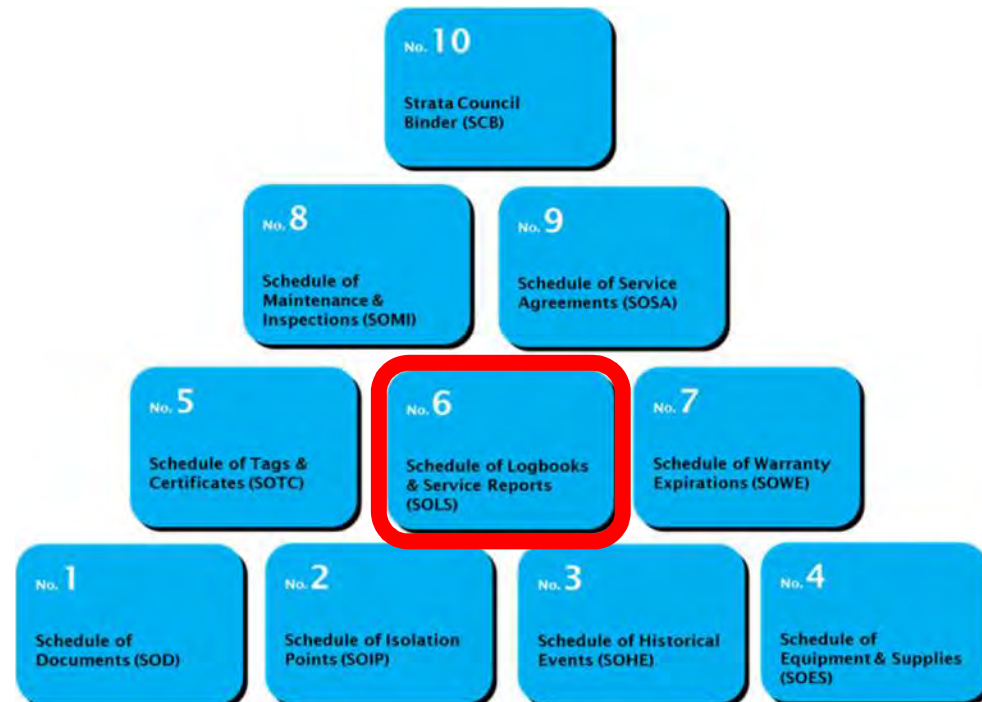
→ Safety

- Reputable trades may refuse to carry out work if certificates are not current and conspicuously posted (eg., fall protection verification).

→ Efficiency

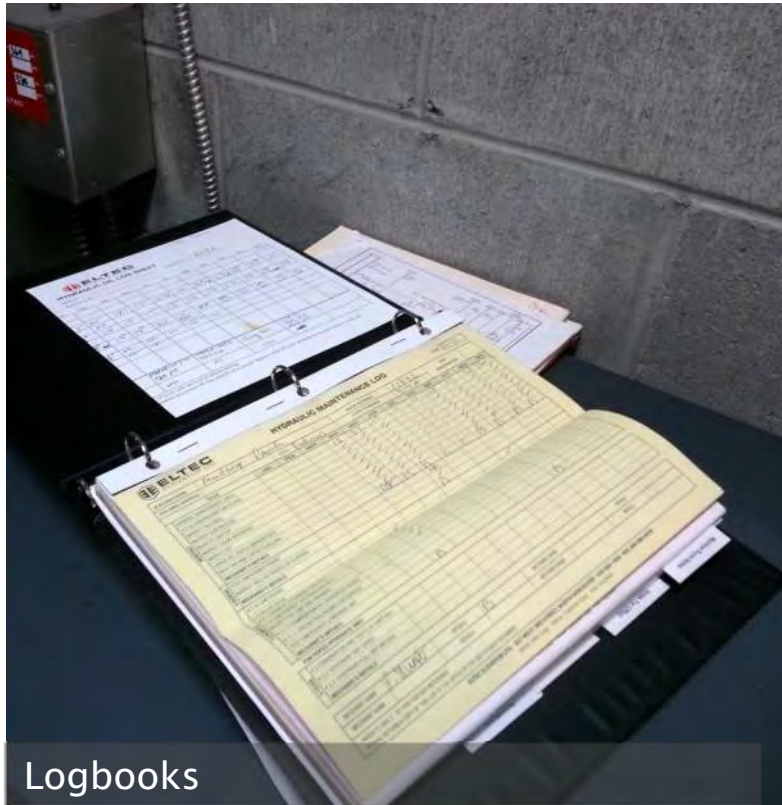
- It assists contractors and consultants.

Schedule Of Logbooks & Service Reports (SOLS)



What Are Logbooks And Service Reports..?

- Documents, usually kept in binders, that are kept near assets.
- Typically located inside the service rooms.

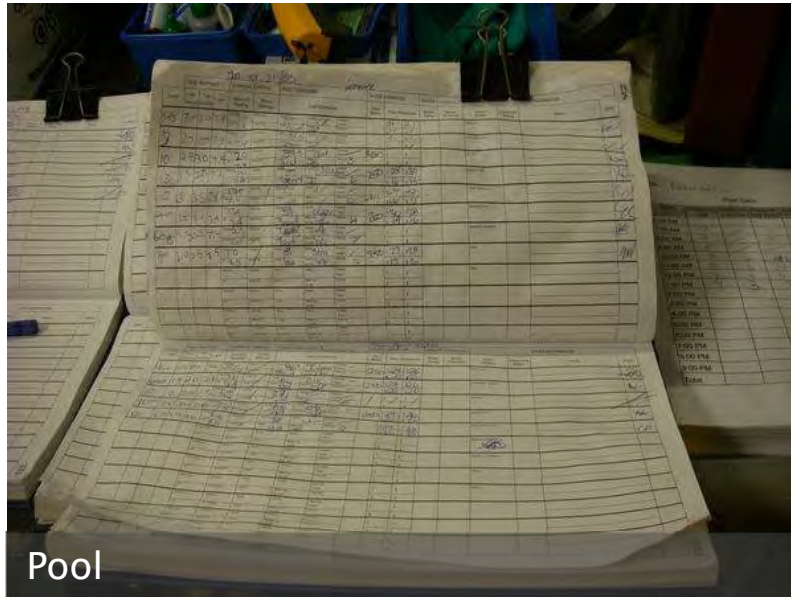


Logbooks

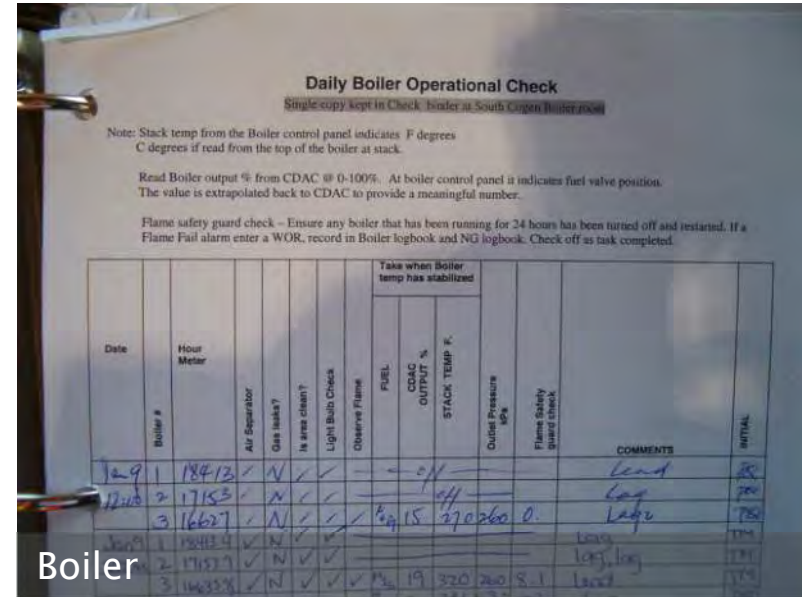
A screenshot of a 'CBSCOM Maintenance Transaction Report' form. The form includes a header with the CBSCOM logo and contact information for CBS Systems International. It features a table for recording maintenance transactions with columns for 'Transaction No.', 'Type', 'Time Used', 'Position', 'Installed Vendor Part Number', 'Mod Level', 'Installed Serial Number', 'Removed', 'Installed Part Status', 'TBO (Hours)', 'TSD (Hours)', 'Material Part', 'Material Cost', and 'Man Hours'. The form also includes sections for 'Type Transactions' and 'Remarks'.

Service Reports

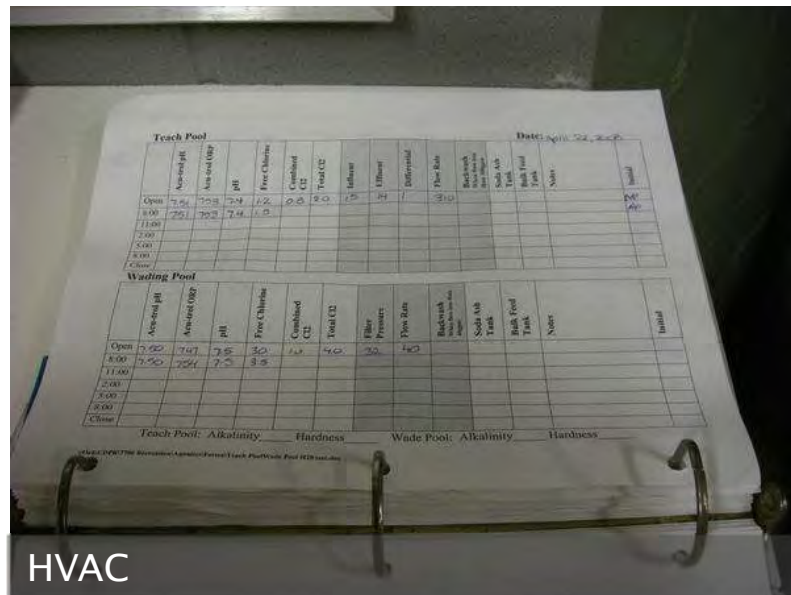
Equipment Requiring Maintenance Logbooks...



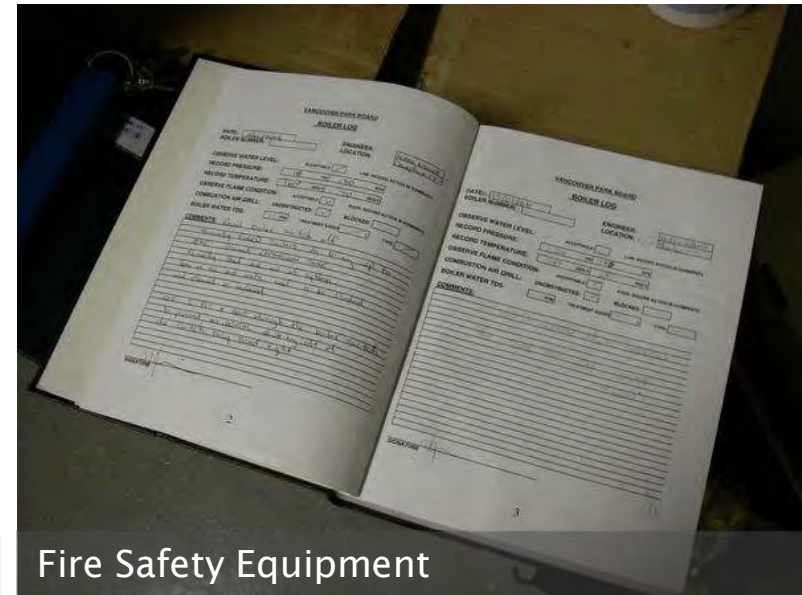
Pool



Boiler

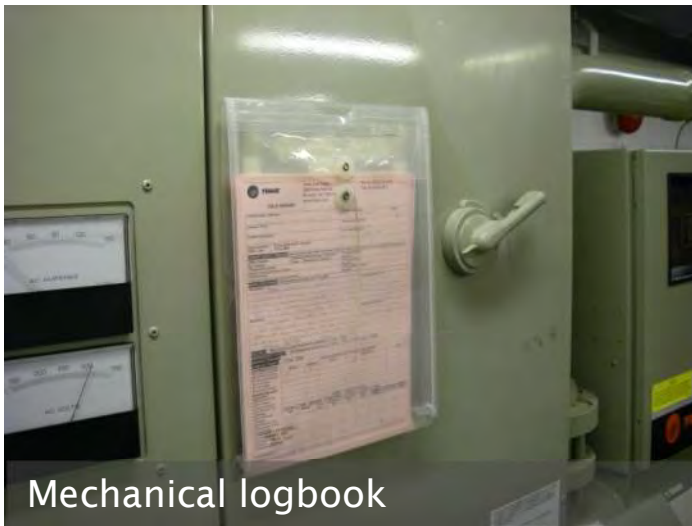


HVAC



Fire Safety Equipment

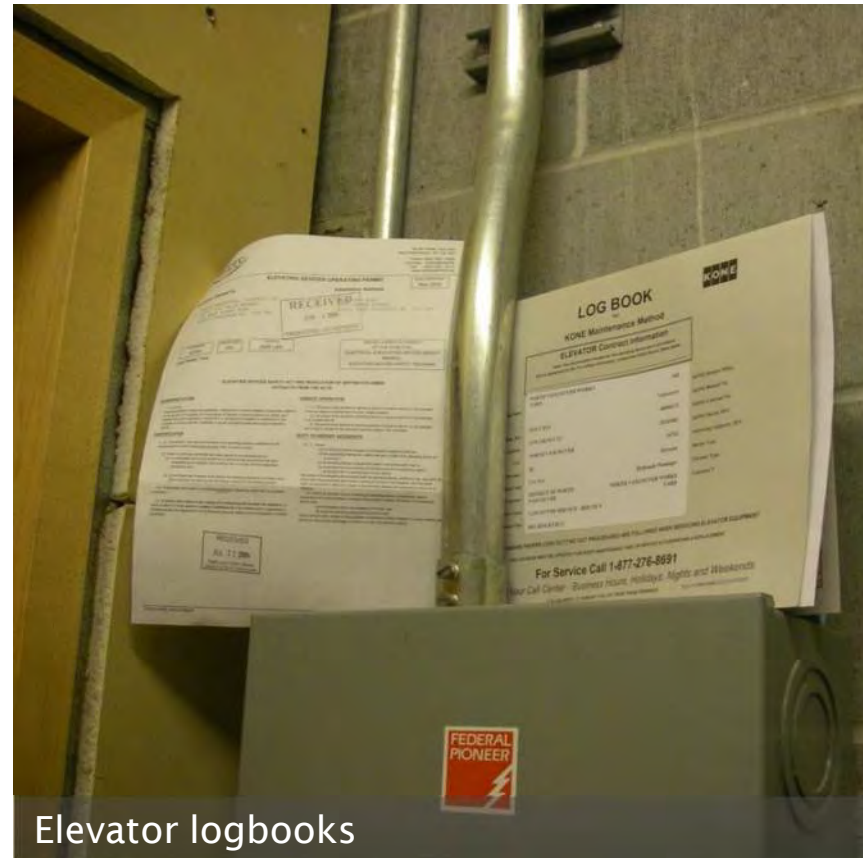
Logs & Reports Located Near The Assets...



Mechanical logbook



Fire alarm logbook



Elevator logbooks

→ **Due Diligence**

- They demonstrate to authorities having jurisdiction and other stakeholders that the corporation is properly maintaining its assets, e.g. warranty providers so that warranty coverage cannot be denied.

→ **Accountability**

- They keep an audit trail of who did the work and when it was done.

→ **Energy Usage**

- They are valuable tools when assessing historic energy use and performance.

→ **Operating Histories**

- They capture the history of certain critical assets.

Log Books & Service Reports Are Vulnerable...

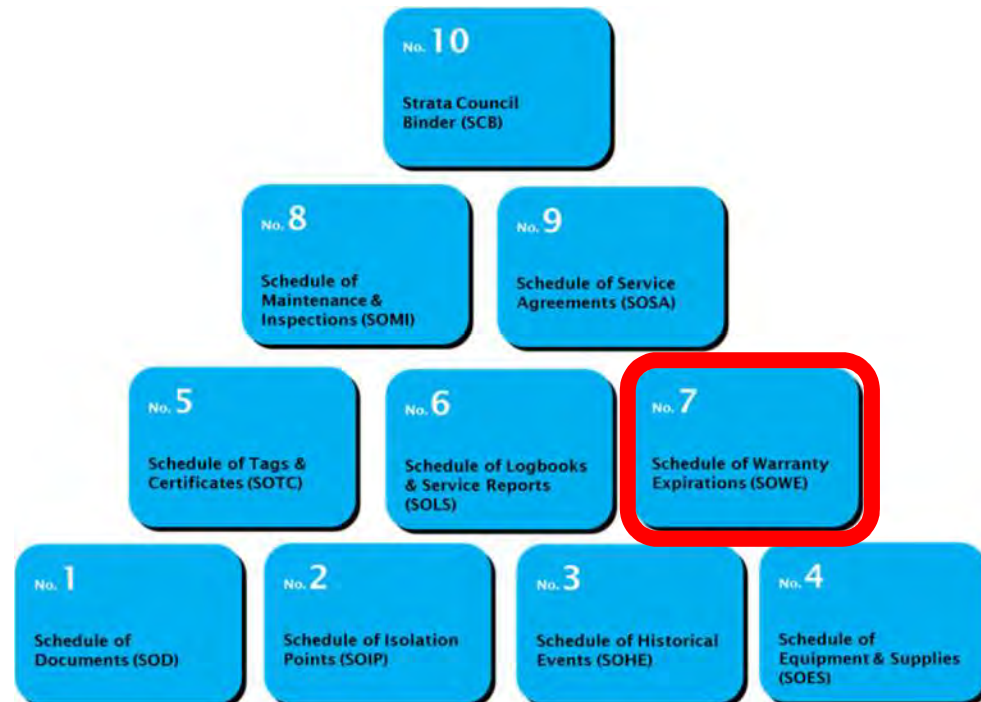


- Be careful for your log books and service reports. They are vulnerable to:
 - Being lost.
 - Being damaged by exposure to moisture and / or dust.
 - Having portions removed and not returned.
 - Inadequate quality of data entry.
- Where practical, keep duplicate or digital copies of your log books and service reports.

Why Is A SOLS Important..?

- It identifies what log books and service reports the strata has.
- It identifies the locations where log books and service reports can be found.

Schedule Of Warranty Expirations (SOWE)



Guides For Consumer Protection



GUIDE TO HOME WARRANTY INSURANCE IN BRITISH COLUMBIA



Published by the Homeowner Protection Office

2009



2-5-10 Year Home Warranty Insurance



HOME WARRANTY INSURANCE REQUIREMENTS FOR NEW HOMES

To increase consumer protection for new home buyers, the *Homeowner Protection Act* regulations for residential builder licensing and mandatory, third-party home warranty insurance were implemented on July 1, 1999. As a result, all new homes constructed with building permits applied for on or after July 1, 1999 must be built by residential builders licensed with the Homeowner Protection Office (HPO) and covered by a policy of home warranty insurance. In geographic areas where building permits are not required, licensing and home warranty insurance is required for new home construction commenced on or after July 1, 1999.

Home warranty insurance can now only be provided by insurance companies that have been approved by the Financial Institutions Commission (FICOM) and meet the requirements of the *Homeowner Protection Act*. (See the HPO bulletin entitled "Understanding Home Warranties" for further information.)

Standards of coverage, commencement dates, exclusions and limits on coverage are now set by government to ensure clarity and a consistent base-level of consumer protection.

MINIMUM STANDARDS OF COVERAGE REQUIRED: 2-5-10

Home warranty insurance on new homes includes a minimum of 2 years on labour and materials, 5 years on the building envelope, including water penetration, and 10 years on structure. The 2-year labour and materials coverage is broken down as follows:

- Any defect in materials and labour:
- 12 months on detached homes and on non-common property in strata units (includes fee simple homes)
 - 15 months on common property of strata buildings

Defects in materials and labour related to the delivery and distribution systems (electrical, plumbing, heating ventilation, air conditioning, etc.):

- 24 months for all buildings.

COMMENCEMENT DATES

Commencement dates on home warranty insurance are:

- Fee simple (primarily detached dwelling units):
- Custom homes: date of first occupancy or date of first occupancy permit, whichever transpires first.

- Spec. homes: Date of first occupancy or date of transfer of legal title to first owner, whichever transpires first.

Strata homes:

- Strata unit: earliest of date of first occupancy or date of transfer of legal title to first owner.
- Common property: earliest of date of first-unit occupancy in strata building or date of transfer of legal title to first owner in building.

HOME WARRANTY INSURANCE EXCLUSIONS

The *Homeowner Protection Act* regulations specify what the home warranty insurance companies can exclude from their policies.

General exclusions can include: landscaping; non-residential detached structures (however, parking structures, recreational and amenity facilities in multi-unit buildings are covered); commercial use areas, roads, curbs and lanes (however, driveways are covered); site grading, and surface drainage; the operation of municipal services; septic tanks and fields; and water quality and quantity.

Defect related exclusions can include: normal wear and tear; normal shrinkage of materials from construction; use of new home for non-residential purposes; materials, labour and design supplied by the owner; damage caused by anyone other than the residential builder; damage caused by insects or rodents; failure of an owner to prevent or minimize damage and acts of nature.

LIMITS ON COVERAGE

Coverage on claims is as follows:

Fee simple (primarily detached dwelling units):

- The lesser of the first owner's purchase price or \$200,000.

Strata homes:

- Strata unit: lesser of the first owner's purchase price or \$100,000.
- Common property: the lesser \$100,000 times the number of dwelling units in the building or \$2.5 million per building.

FOR MORE INFORMATION CONTACT

Homeowner Protection Office

Telephone: (604) 646-7055

Toll-free: 1-800-407-7757

Fax: (604) 646-7051

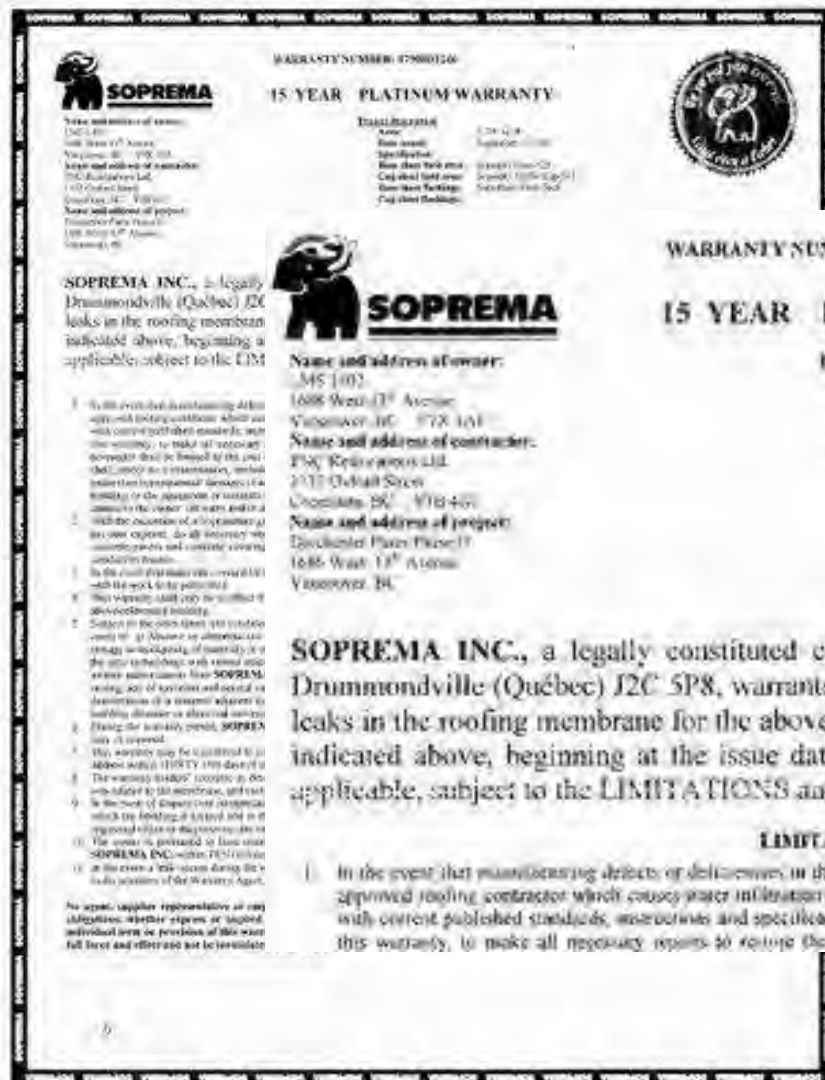
email: hpo@hpo.bc.ca

Web site: www.hpo.bc.ca

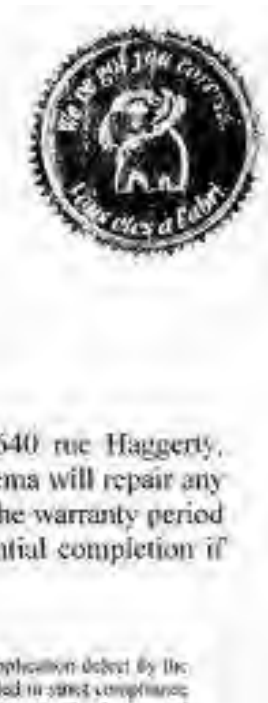
UWV

RESTORING CONFIDENCE

Examples Of Warranty Certificates



Duration of the warranty (15 years)



Examples Of Warranty Inter-Relationships

Warranty on labour
(2 years)



Warranty on the vision glass
(10 years)

Warranty on frame
(2 years)

Why Is A SOWE Important..?

→ **Protection**

- To protect the owners in the event of a warranty claim.
- To avoid missing warranty expiry dates on claims.
- To give the owners time to prepare for warranty reviews, including the preparation of consultant reports, prior to the expiration of the warranty periods.
- To help ensure the owners do the necessary maintenance and care to guard against voiding of any warranties.

→ **Accountability**

- To hold contractors and others accountable in accordance with the terms and conditions of the warranties.

→ **Cost Savings**

- To avoid spending money on items that are covered by warranty.

Template For A SOWE



No. 7

Schedule of Warranty Expirations (SOWE)

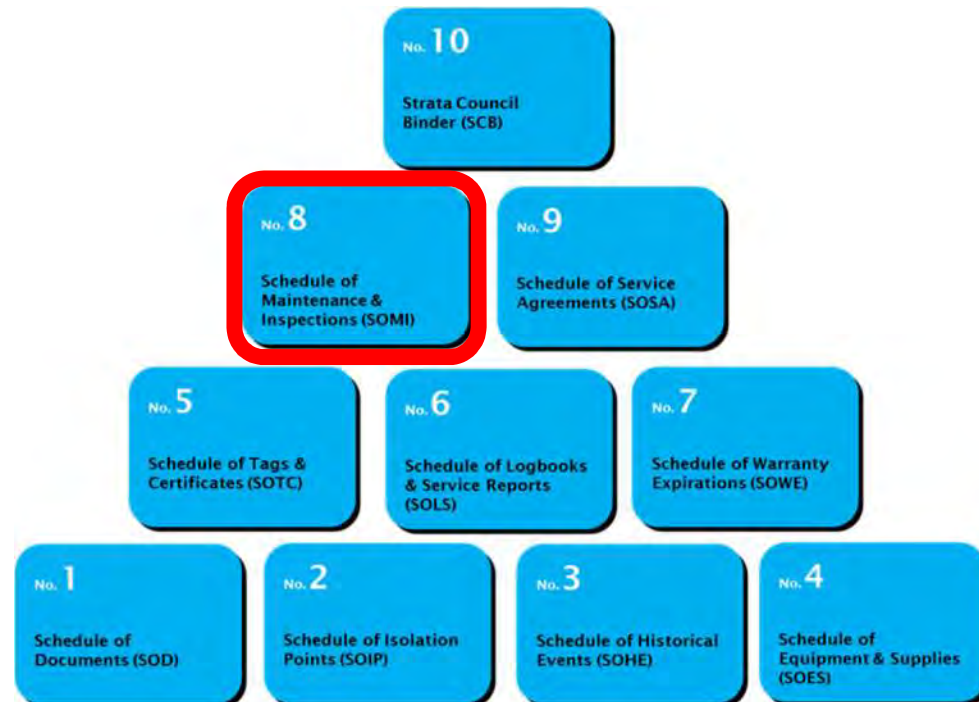
Strata Number: _____

Date: _____

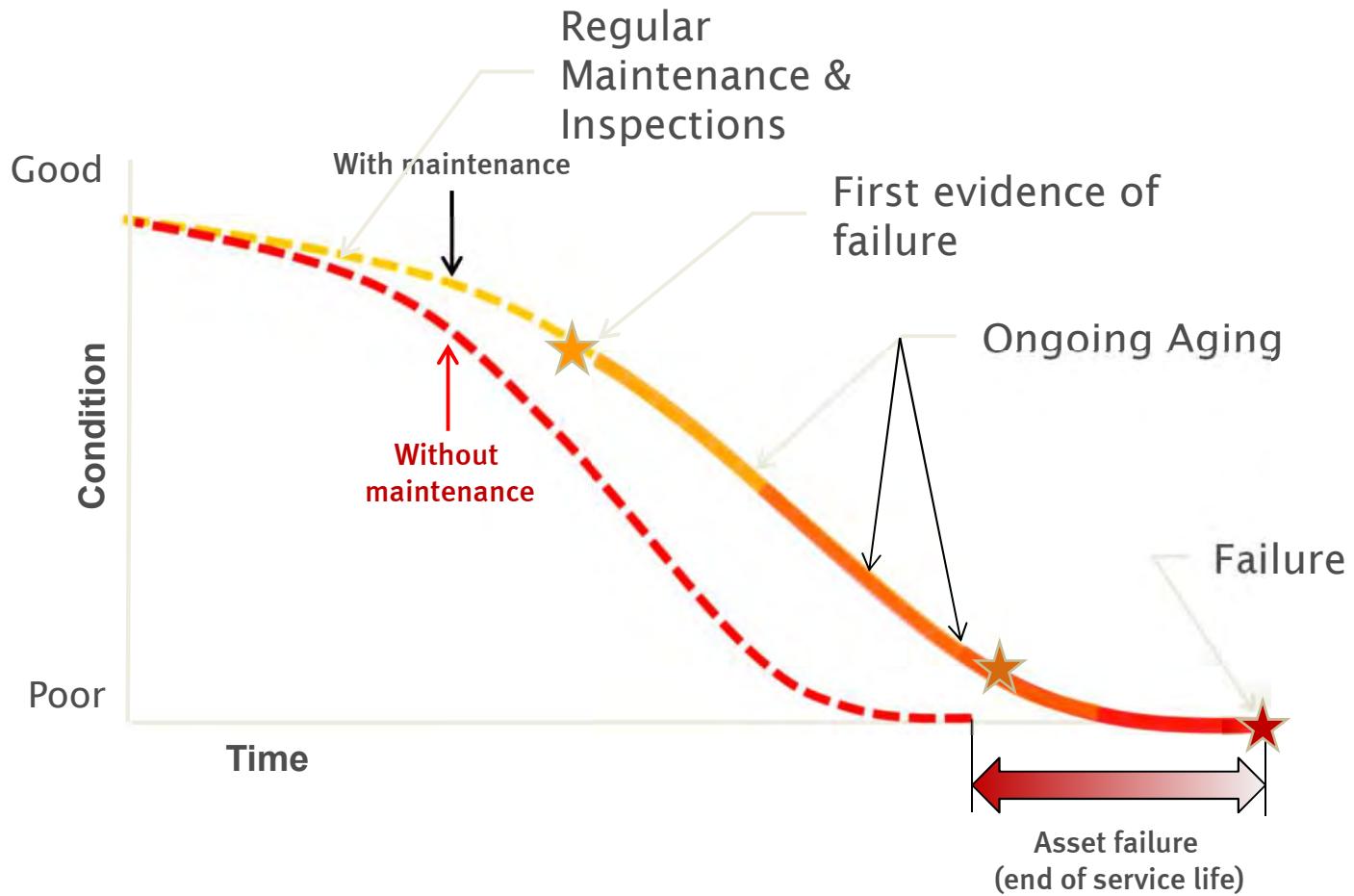
A. Building Enclosure (roofs, windows, etc)							Entered by:
	Duration	Expiration	Contractor	Consultant	Notes		
Example	Shingle roof - manufacturer	25 years	2025	ABC roofing	None	Pabco shingles	DA
	Shingle roof - contractor warranty	1 year	2025	ABC roofing	None	Pabco shingles	
1							
2							
3							
3							

C. Mechanical System (pumps, fans, motors, boilers, etc)							Entered by:
	Date	Expiration	Contractor	Consultant	Notes		
1							
2							
3							
4							

Schedule Of Maintenance & Inspections (SOMI)



Maintenance & Asset Condition – Slide 1



Minor And Major Maintenance Examples...

Minor Maintenance:

Performed yearly or more often.



- For example, weekly, monthly, quarterly, semi-annually.
- Example: Vacuum the hallway carpets.
- Paid from the operating budget.

Major Maintenance:

Performed less frequently than yearly.



Exterior painting (5-8 years)

- For example, every 2,3, 5, 10 years.
- Example: thermal scanning of electrical panels
- Paid from the contingency reserve fund.

Not All Maintenance Needs Are Visible



In-Ground Camera Scoping Surveys



Maintenance Checklists



ENCLOSURE			Freq.	Event Cost *
End 1 Roof Membranes w/ Ballast				
M1	Annualized Cost	Aggregate annual costs for maintenance of urethane membrane with ballast.	1 Yr.	\$600
M2	Maintenance Level 1	Clean roof drains.	6 Mo.	Annualized
M3	Maintenance Level 1	Clean exposed surface of roof assembly to remove seasonal debris, pollutants, dust, dirt and other materials.	1 Yr.	Annualized
M4	Maintenance Level 2	Remove ballast and visually review the surface of the membrane for signs of distress, such as delamination and blistering.	1 Yr.	Annualized
M5	Maintenance Level 3	Locally repaint flashings.	15 Yr.	\$2,000
R1	Renew Component	Replace urethane membranes in the triangular townhouse roof areas.	20 Yr.	\$80,000
R2	Renew Assembly	Replace urethane membranes at the top of the tower and above Drake St townhouses.	20 Yr.	\$120,000
O1	Operational Events	Ensure that a log is maintained of all tenant installed equipment and service penetrations through the roof.	as req.	Annualized
A1	Assessment	Review adequacy of roof maintenance checklists and frequencies. Update the maintenance plan based on environmental conditions, experiences over the preceding year, and feedback from service contractors.	1 Yr.	Annualized
O2	Operational Events	Ensure that adequate safety measures are taken when performing maintenance and repair activities at the perimeter of the roofs.	as req.	Annualized
O3	Operational Events	Ensure that access onto the roof is limited only to essential maintenance personnel.	as req.	Annualized
O4	Operational Events	If a new penetration must be made through the roof, contact the product manufacturer or original roofing trade for appropriate tie-in details and to ensure warranties are maintained.	as req.	Annualized
O5	Operational Events	Ensure that window washing contractors use rope guards in all locations where the ropes come in contact with the parapet conditions at the edge of the roof.	as req.	Annualized
O6	Operational Events	Ensure that a log is kept of rooftop equipment and service penetrations through the roof.	as req.	Annualized
O7	Operational Events	When it is necessary for workers to be on the roof to service roof top equipment (such as HVAC or telecommunication antennas), workers should be cautioned to use walkways and to exercise care with their tools and equipment to avoid puncturing the roof membrane.	as req.	Annualized
End 2 Deck Membranes w/ Pavers				
M1	Annualized Cost	Aggregate annual costs for maintenance of inverted roof with urethane membrane and overlaid with pavers.	1 Yr.	\$1,800
M2	Maintenance Level 1	Remove debris from all drains and scuppers, including vegetation so drainage is not obstructed.	6 Mo.	Annualized
M3	Maintenance Level 1	Clean exposed surface of roof assembly to remove seasonal debris, pollutants, dust, dirt and other materials.	1 Yr.	Annualized
M4	Maintenance Level 1	Power wash pavers. (Costs borne by unit owners).	2 Yr.	Annualized
M5	Maintenance Level 2	Remove pavers at selected locations and visually review the surface of the membrane, particularly at penetrations, for signs of distress, such as delamination, cracks.	1 Yr.	Annualized

- By asset.
- By season.
- By skill level or person.
- By frequency.
- By location.

Template For A SOMI



No. 8

Schedule of Maintenance & Inspections (SOMI)

Strata Number: _____
 Date: _____

a B C			D E F G				H I J K L M					
Component	Location	Description	Chronological Age	Effective Age	Service Life (years)	Remaining Life (years)	Outstanding Conditions	Frequency of Inspection	Service Provider	Projected Annual Cost	Contract Supervisor	Reporting Requirements
<i>Example: Roof</i>	<i>3rd floor of main building</i>	<i>2-ply SBS roof</i>	<i>10</i>	<i>10</i>	<i>25</i>	<i>15</i>	<i>none</i>	<i>Yearly</i>	<i>ABC roofing</i>	<i>\$1,200</i>	<i>Property manager</i>	<i>Semi-annual</i>
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												

“Failing to Plan
is
Planning to Fail.”

A Few Of My Favorite Photos – Page 1



A Few Of My Favorite Photos – Page 2



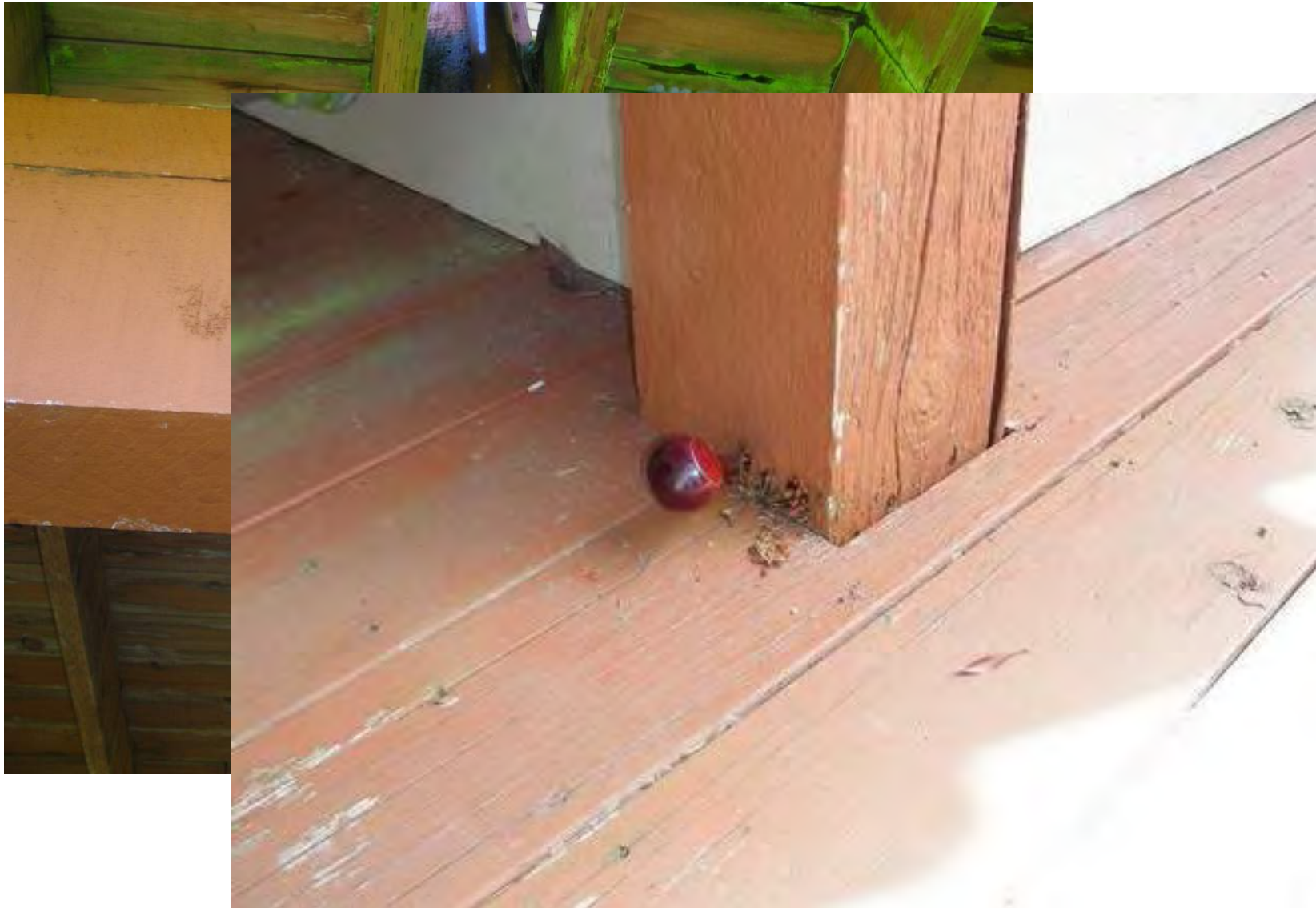
A Few Of My Favorite Photos – Page 3



A Few Of My Favorite Photos – Page 4



A Few Of My Favorite Photos – Page 5



Why Is A SOMI Important..?



→ **Planning**

- To identify resource requirements.
- To help track and verify that a program has been completed.
- To schedule staff and coordinate with the ownership.

→ **Estimating**

- To determine optimal pricing for maintenance.

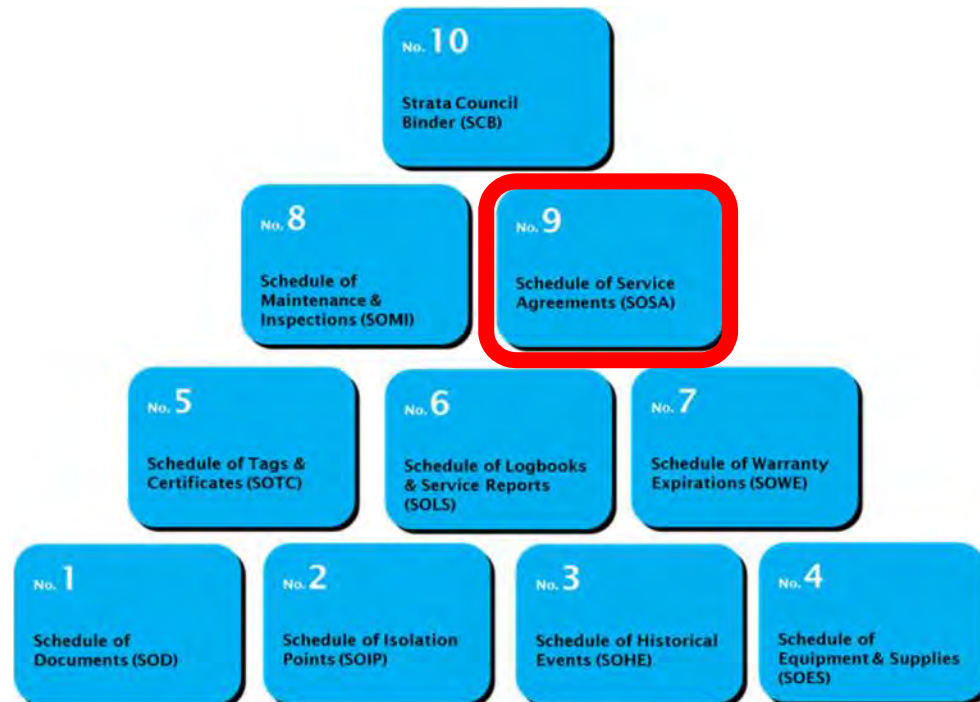
→ **Budgeting**

- To inform the owners to be prepared and not surprised.

→ **Funding**

- To demonstrate the need for adequate funding to complete the necessary work.

Schedule Of Service Agreements (SOSA)



Service Contracts/Agreements



Renewal or Termination:

This agreement will automatically renew annually unless cancelled by either party within 30 days of written notice.

CUSTOMER'S OBLIGATIONS

The Customer is responsible for ensuring that elevator pits are free of water and rubbish.

The Customer will provide or allow prompt access to the Equipment.

The first year maintenance service price \$ Five Thousand Five Hundred (\$1,375.00 Quarterly)

Plus applicable taxes, shall be Quarterly Semi Annual, in advance

Method of payment shall be Electronic Debit Invoiced.

Service shall commence on November 1, 2000

Maintenance Service Agreement term: 1 2 3 4 5 Years

Which Assets Need Service Agreements..?



Townhouse Complex

Standard

- Landscaping
- Groundskeeping
- Snow clearing
- Pest control
- Pool/spa

Typically Neglected

- Roofs
- Site Infrastructure



Low-Rise Buildings

Standard

- Elevators
- HVAC
- Fire safety/alarm
- Janitorial
- Landscaping
- Pool/spa

Typically Neglected

- Roofs, decks, balconies



High-Rise Buildings

Standard

- Fall protection
- Elevators
- HVAC
- Standby Generator
- Fire safety/alarm
- Pool/spa/fitness equip.
- Janitorial
- Landscaping

Typically Neglected

- Roofs, decks, balconies
- Walls & glazing
- Drainage

- A 12 year old strata corporation hired an engineering firm to prepare a depreciation report.
- During the site visit, a fan in the parkade was found to be inoperable and the gas sensors were also not working.
- No test tags on the equipment.
- The documents were reviewed. The HVAC contractor did not include this equipment in their mechanical inventory
- The fan remained un-serviced for 12 years and the gas sensors were not tested so the owners were not protected against gas buildup in the parkade or the adjacent occupied areas.

Why Is A SOSA Important?

- To help manage service providers:
 - To institute cost controls.
 - To establish reporting requirements.
 - To establish performance schedules.

Template For SOSA



No. 9

Schedule of Service Agreements (SOSA)

Strata Number: _____

Date: _____

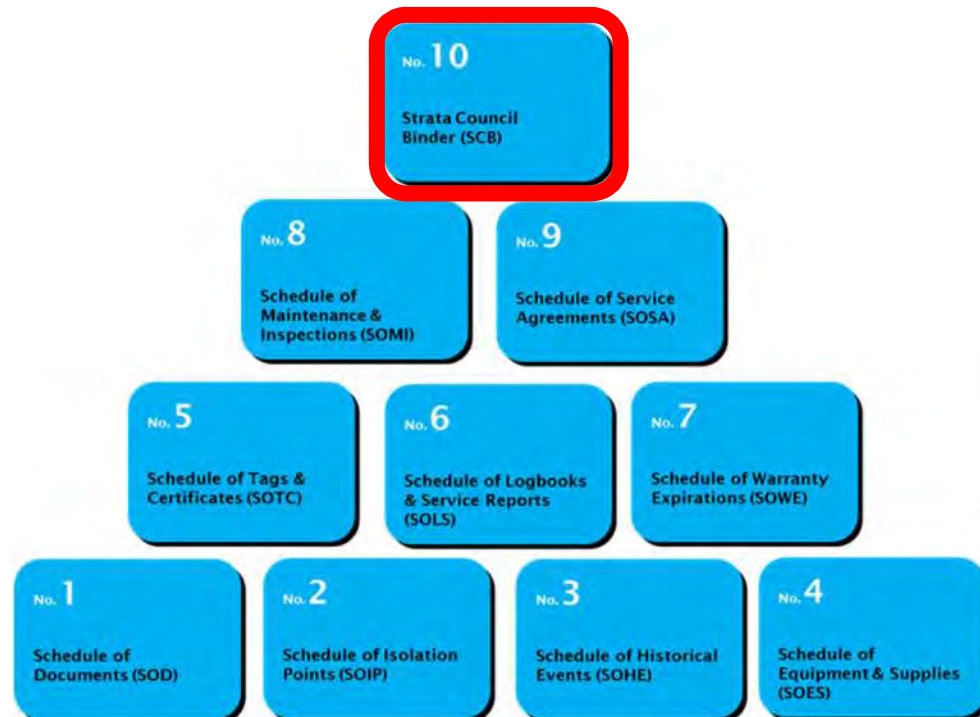
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
Contractor	Scope of	Contract on File	Start Date	Renewal Anniversary	Review	Term of	Contract	Reporting	Value \$	Terms \$	Contact	Contact Phone	Contact Email	Work	13. supervi	Projected Completio

Contractor	Scope of Service	Contract on File Locator	Start Date	Renewal Anniversary Date	Review Date	Term of Contract	Contract Supervisor*	Reporting Obligations	Value \$	T
------------	------------------	--------------------------	------------	--------------------------	-------------	------------------	----------------------	-----------------------	----------	---

<i>Example: 123 Mechanical</i>	<i>HVAC</i>	<i>Property manager</i>	<i>2008</i>	<i>Mar. 2014</i>	<i>Dec. 2013</i>	<i>See file</i>	<i>Property manage</i>	<i>Quarterly</i>	<i>\$6,000</i>	
--------------------------------	-------------	-------------------------	-------------	------------------	------------------	-----------------	------------------------	------------------	----------------	--

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Strata Council Binder (SCB)



What Is A SCB..?

- It's a master library / compilation of reference documents.
- Ideally its both in:
 - Physical form.
 - Electronic form.
- It is updateable.
- It's portable.
- It's useable.

Strata Council
Facility Binder

Registered Bylaws, Rules, Parking Space & Storage Locker Plans	1
Strata Plan Common Index, Schedules of Voting Entitlement	2
Annual Operations Plan	3
Depreciation Report	4
Strata Property Act & Regulations	5
Insurance Documents	6
Annual Budget & ¼ Vote Resolutions for Special Levies or CRF Expenses	7
AGM/SGM Minutes	8
Council Meeting Minutes	9
Monthly Financials	10

Why Is A SCB Important..?

- It includes information to aid in decision making:
 - Objective decisions based on fact.
 - It facilitates consistent decisions over time.
- It's a central source of information to help you:
 - Know what you have.
 - Know where you have it.
 - Not get overwhelmed by issues.
- It helps manage transitions:
 - New strata councils.
 - New strata managers.
 - New strata management.
- It helps manage the evolution of the community.

Self Evaluation – What Tools Are You Missing..?



No. 10

Strata Council Binder (SCB)

No. 8

Schedule of Maintenance & Inspections (SOMI)

No. 9

Schedule of Service Agreements (SOSA)

No. 5

Schedule of Tags & Certificates (SOTC)

No. 6

Schedule of Logbooks & Service Reports (SOLS)

No. 7

Schedule of Warranty Expirations (SOWE)

No. 1

Schedule of Documents (SOD)

No. 2

Schedule of Isolation Points (SOIP)

No. 3

Schedule of Historical Events (SOHE)

No. 4

Schedule of Equipment & Supplies (SOES)

A Couple Of Examples...

→ Here are a couple of examples of how the tools work together...

A Pipe Has Burst, What Do We Do..?

Before the event:

- Ensure that **SO Isolation Points** is up to date
- Ensure that valves are being maintained in accordance with **SO Maintenance & Inspections**

During the event:

- Go to **SO Isolation Points** to confirm location of valves. Or, go to the mechanical room and review the valve chart
- Follow the shut off procedures
- Call the service contractor listed in **SO Service Agreements** to carry out the necessary repairs

After the event:

- Record what happened in **SO Historical Events**

We Are Unhappy With Our Contractor, What Do We Do? RDH

- Go to **SO Service Agreements** to determine their contract obligations:
 - What do we need to do to improve the situation?
 - What are our obligations?
 - What are theirs?
- Go to **SO Maintenance & Inspections** to confirm what maintenance schedules are necessary:
 - Are they meeting our needs?
 - Is it written in the agreement?
- Go to **SO Tags & Certificates** to confirm whether the contractor signed the tags and certificates:
 - Have they fulfilled their obligations?
- Go to **SO Equipment Supplies** to determine what equipment and supplies are on site that belong to the contractor:
 - Is everything we need available?

To Get The Maintenance Workbook...



→Go to:

<http://learning.rdh.com/workbook>





Questions

→ rdhbe.com

RDIH