

Water Managed Sites Tier 2 Irrigation Site Assessment

Overview

The following report is a collection of site data, field measurements, observations, and maintenance recommendations. Through this data gathering, in compliance with The City of Calgary Water Managed Sites Program and the Water Utility Bylaw 40M2006 – Schedule E – Outdoor Water Use Restrictions, a basic irrigation schedule that will assist the site water manager or property owner in managing overall irrigation usage, can be developed.

Criteria and Requirements are subject to change. Following the up-to-date City of Calgary Water Managed Sites Program website is the best way to stay informed. The Auditor must obtain and adhere to current City of Calgary criteria and requirements.

*For recommended assessment and audit guidelines, visit the Canadian Prairie Chapter of the Irrigation Association (CPCIA) website at: [Audit Guidelines](#)

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Tier 2 Water Managed Sites Qualifying Criteria, Equipment and Hardware Requirements

Tier 2 Qualifying Criteria and Requirements

Small ICIs and Single -Family Residential including:

- Single-Family or Two-Family Residence (Duplex)
- Institutional, Commercial, Industrial, Hospitals, Homeowner Associations, Multi-family Condominiums and Townhouses.

Public Spaces, Large ICIs and Multi -family Sites including:

- i. Sports Fields, Athletic Fields, Schools/Universities and Golf Courses.
- ii. Institutional, Commercial, Industrial, Hospitals, Homeowner Associations, Multi-family Condominiums and Townhouses.

*** Catch Can Audit, and DU Calculations are not required under Tier 2.**

Equipment and Hardware Requirements

To qualify to be Certified as a Water Managed Site, the irrigation system is required to have the following Equipment and Hardware installed and enabled:

1. Dedicated Water Meter or Totalizer installed at the point of connection.
2. Dedicated Testable Cross Connection Control Assembly installed on the irrigation mainline, downstream from the Water Meter or Totalizer. (ONLY DCVA or RP type devices are accepted.)
3. Flow Sensor installed and enabled downstream from the Cross Connection Control Assembly.
4. Electric Master Valve installed upstream from any irrigation emission components.
5. Local Irrigation Interruption Device installed and enabled, such as: Rain Switch and or, Soil Moisture Sensor and or, Weather Station.
6. Automatic Smart Irrigation Controller with near-real time weather and/or soil moisture adjustment and remote management capability.

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Irrigation Site Information – Tier 2

Irrigation Site Assessment date (YYYY-MM-DD):

Site Type (select all that apply):

- ☐ Park
- ☐ Playground
- ☐ Residential lot
- ☐ Residential multi-family (apartments and condos)
- ☐ Green Space
- ☐ Commercial/Industrial/Institutional lot
- ☐ Golf course
- ☐ Sports field
- ☐ Other _____

Name of site (if applicable): _____

Name of registered owner of site: _____

Site Address: _____

Certified Landscape Irrigation Auditor (CLIA) Information

CLIA name:

CLIA phone number:

CLIA email:

Name of employer:

Employer's address:

Note: For Irrigation Site Assessment and Audit results, please refer to the Auditor's Observations section.

I Certify the above Irrigation Site has been assessed and audited in accordance with The City of Calgary Water Services Bylaw 40M2006, and the AI Landscape Irrigation Auditor, Current Edition Handbook recommended audit guidelines.

CLIA signature: _____

CLIA/membership expiry date: (yyyy-mm-dd)

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Equipment and Hardware Checklist

Equipment/Hardware	Installed	Enabled	Qty. On Site
Water Meter/Totalizer			
Cross-connection Control			
Flow Meter/Sensor			
Electric Meter Valve			
Rain Switch/Rain-Freeze Sensor/Tipping Bucket			
Soil Moisture Sensor			
Weather Station			
Near-real Time Weather Adjustment			
Soil Moisture Adjustment			

Notes

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Equipment and Hardware Information

Water Meter/Totalizer 1

Meter number:

Meter Type:

Unit of measure:

Size of meter (inches):

Meter location:

Meter reading start of season:

Water Meter/Totalizer 2

Meter number:

Meter Type:

Unit of measure:

Size of meter (inches):

Meter location:

Meter reading start of season:

Water Meter/Totalizer 3

Meter number:

Meter Type:

Unit of measure:

Size of meter (inches):

Meter location:

Meter reading start of season:

Equipment and Hardware Information

Cross Connection Control 1

Type of Assembly:

☐ DCVA

☐ RP

☐ Other:

Manufacturer:

Model number:

Serial number:

Size (inches):

CCC assembly location:

Date installed: (yyyy-mm-dd)

Last Pass Test Date: (yyyy-mm-dd)

Cross Connection Control 2

Type of Assembly:

☐ DCVA

☐ RP

☐ Other

Manufacturer:

Model number:

Serial number:

Size (inches):

CCC assembly location:

Date installed: (yyyy-mm-dd)

Last Pass Test Date: (yyyy-mm-dd)

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Equipment and Hardware Information

Flow Sensor

Manufacturer	Model Number	Size(inches)	Location
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Manufacturer	Model Number	Size(inches)	Location
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Manufacturer	Model Number	Size(inches)	Location
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Master Valve

Manufacturer	Model Number	Size(inches)	Location
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Manufacturer	Model Number	Size(inches)	Location
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Manufacturer	Model Number	Size(inches)	Location
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Local Irrigation Interruption device

Manufacturer	Model Number	Size(inches)	Location
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Manufacturer	Model Number	Size(inches)	Location
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Manufacturer	Model Number	Size(inches)	Location
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Equipment and Hardware Information

Soil Moisture Sensor

Manufacturer	Model Number	Size(inches)	Location
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Manufacturer	Model Number	Size(inches)	Location
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Manufacturer	Model Number	Size(inches)	Location
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Automatic Irrigation Controller with Remote Management Capability

Manufacturer	Model Number	Size(inches)	Location
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Manufacturer	Model Number	Size(inches)	Location
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Manufacturer	Model Number	Size(inches)	Location
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Sprinkler System Review

Abbreviation Key: S=Spray, R=Rotor, MR=Multi-stream Rotary, D=Drip

Controller ID/Name					
Station #					
Sprinkler Type					
Station Flow Rate (gpm)					
Sprinkler System Review Checklist					
	No Visible or detected broken/kinked/leaking pipes or fittings				
	System Operating Pressure within manufacturer recommended range				
	Valves are functioning properly from the controller				
	No missing/broken/leaking sprinkler heads				
	No low head drainage				
	Sprinkler head spacing is even				
	No sunken/tilted sprinkler heads and nozzles				
	No mismatched sprinkler heads and nozzles				
	No missing/broken/clogged/misaligned nozzles				
	No spray pattern deflected or blocked				
Drip/Micro System Review Checklist					
	No visible or detected broken/kinked/leaking tubing or fittings				
	No missing/clogged/broken emitters				
	No missing/clogged/broken micro heads/nozzles				
	System operating pressure within manufacturer recommended range				
	Filter does not need servicing				

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Irrigation System Zone Map

Irrigation Zone map

Must include the following

- POC location
- Controller location
- Sensor location
- Station Areas
- Station Irrigation Type (Spray/Rotor/etc.)

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