

**AFTER RECORDING RETURN TO:**  
Klamath County Public Works  
305 Main Street  
Klamath Falls, OR 97601



11/10/2021 04:08:19 PM

Fee: \$142.00

**Declaration of Covenants for the  
Operation & Maintenance of  
Stormwater Facilities  
For  
Maywood Industrial**

Declaration of covenants affecting the real property described as 3909-09AA-01200, within Klamath County, Oregon (hereinafter referred to as the “property”), for the express purpose of causing the owners of said property to have knowledge of, and be subject to performing the operation and maintenance of the stormwater facility located on the property that serves the proposed industrial building and site.

NOW THEREFORE, the undersigned Maywood South, LLC, owners of said property, do hereby declare that they, their heirs, successors and assigns, will manage, operate, and maintain said stormwater facility as prescribed below:

- 1) The property owner/owners or their designees agree to submit a copy of the completed O&M Plan Form, a recorded copy of this Covenant, as well as a recorded copy, if needed, of an O&M Agreement to Klamath County, hereinafter referred to as “County”, prior to the approval of the building permit.
- 2) This Covenant shall remain in full force and effect unless canceled or modified with the written consent of the County and the property owner/owners or their designees.
- 3) The property owner/owners or their designees shall keep a copy of the O&M Plan Form, this Covenant, and the as-constructed plans of the facility available on the premises. These shall be made available to County staff upon request.
- 4) All areas within the stormwater facility and easements associated with the stormwater facility shall be maintained in accordance with the O&M plan.
- 5) Modifications of physical features within the stormwater facility shall not be made by property owner/owners or their designees without receiving prior written authorization from the County.
- 6) The property owner/owners or their designees agree to contact the County with updated names, addresses, and phone numbers for owners, responsible parties and emergency contacts should the information on the Operation and Maintenance Plan Form change.

7) The property owner/owners or their designees shall maintain, repair or replace part or all the facility as necessary to ensure it is functioning as originally designed or as modified per written agreement with the County.

8) The property owner/owners or their designees should inspect the facility in accordance with the approved table of maintenance requirements submitted with the O&M Plan to ensure it is functioning properly, but at a minimum, inspections must be performed annually.

9) If the system is not functioning properly or any of the conditions requiring corrective actions as shown on the table of maintenance requirements, corrective actions will be taken within 15 calendar days unless other arrangements are made with the County.

10) The property owner/owners or their designees shall keep records of system inspections and maintenance. Records shall note inspection dates, any conditions requiring maintenance actions, and maintenance conducted. Records shall be made available to County staff upon request.

11) County staff shall have the right to enter upon the property for purpose of inspecting, and reasonably monitoring performance of the flow control facilities using the maintenance access routes specified in the O&M plan.

12) County staff shall make a reasonable effort to notify the property owner/owners or their designees prior to routine inspections. Unless otherwise agreed upon between County staff and the responsible party, routine inspections shall be scheduled Monday through Friday during normal business hours

13) Upon inspection of the facility, County staff will notify the property owner/owners or their designees in writing of any noted conditions, or practices that are not in compliance with the approved O&M Plan and will specify a time frame for corrective actions.

14) Failure to correct a defective condition within the time frame specified by the County inspector or continued non-compliance with practices and procedures specified in this O&M Plan may result in a nuisance per the Klamath County Code, currently Chapter 401, and subject to the violation provisions of the Klamath County Code, currently Chapter 800. Stormwater facilities as well as the adjacent right-of-way, easements, and/or private property upon which they reside are subject to all nuisance provisions of the Klamath County Code, including control of noxious weeds, vegetation and removal of litter and debris, except as they relate to the approved vegetation within the water quality functioning portion of the stormwater treatment facility.

15) The property owner/owners or their designees shall not apply or dump any pesticides, herbicides, petroleum-based products or other hazardous or foreign substances within a stormwater facility.

16) Dead vegetation and cutting, including grass cuttings, shall be removed from the stormwater facility and disposed of in accordance with local and State requirements.

17) If a complaint is received or an inspection reveals that a stormwater facility is infested with mosquitoes or other vectors, the property owner/owners or their designee shall contact Vector Control to eliminate the infestation. Owners may also employ one of the following to help mitigation mosquito infestations:

- a) Installation of predacious bird or bat nesting boxes.
- b) Alterations of pond water levels approximately every four days in order to disrupt mosquito larval development cycles.

If corrective action has not taken place within 15 days, the County will take corrective action and charge the costs to the subject property owner.

18) The property owner/owners shall bear all responsibility and cost to remove and replace any portion or affected portion of the stormwater facility located within any Public Utility Easement (P.U.E.) located on the subject property at such time when the benefitting agency deems it necessary for access, maintenance and/or other activities as permitted by the P.U.E.

The above covenants shall run with the land, be enforceable by Klamath County, and shall be binding upon the property owner/owners, their heirs, successors, and assigns.

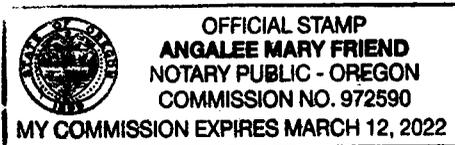
IN WITNESS WHEREOF, the property owner(s), signed this 30 day of July, 2021.

Robert A. Stewart member  
(Owners Signature)

\_\_\_\_\_  
(Owners Signature)

STATE OF Oregon )  
 ) ss.  
County of Klamath )

On July 30, 2021, personally appeared Robert Stewart, who, being first duly sworn, did acknowledge that he is the Member of Maywood South that the foregoing instrument was signed on behalf of \_\_\_\_\_, that he/she is authorized to execute this instrument and that this instrument is the voluntary act and deed of that entity.



WITNESS my hand and official seal.

Angalee Mary Friend  
SIGNATURE OF NOTARY PUBLIC  
Notary Public for Oregon  
My Commission Expires: March 12, 2022

**THE FOREGOING IS HEREBY ACCEPTED BY KLAMATH COUNTY**

By: \_\_\_\_\_  
Public Works Director

Date: \_\_\_\_\_, 20  .

# **Private Storm System and Stormwater Facility Maintenance Manual**

**Prepared For:**

**Maywood Ave Industrial Suites  
Klamath County, Oregon**

**May, 2021**

**PRESENTED BY:**

**R-C**  
**RHINE-CROSS**  
**GROUP**

**CIVIL ENGINEERING ■ SURVEYING ■ PLANNING**  
112N 5<sup>th</sup> ST - Suite 200 - P.O. BOX 909  
KLAMATH FALLS, OR 97601  
(541) 851-9405

# INSPECTION AND MAINTENANCE ACTION CHECKLISTS

The following inspection and maintenance action checklists (IMACs) are provided primarily for maintenance field staff. The checklists indicate recommended inspection frequency, conditions to look for, corrective actions, special considerations, and estimated time to perform the work. They can assist management staff with maintenance planning, scheduling, staffing, and budgeting. The work time estimates given on the checklists should be compared to actual effort required to perform each task in the future and revised as necessary.

Continual review, feedback, and revision of the checklists will make them more effective tools in the effort to manage stormwater. Some facilities will have specific maintenance requirements that are not included in these checklists; these requirements should be followed in addition to what is included on the IMACs.

The IMACs define the frequency at which facilities should be inspected for each potential problem condition. The frequencies are defined as follows:

- Storm—After any major storm (0.8 inches or more in 24 hours)
- Monthly—Each month from November through April
- Annual—Once a year in early spring or fall.

Special considerations listed in the checklists are given as code numbers, identified as follows:

1. **Procedures**—Consult the County Engineer with questions regarding performance of work.
2. **Waste management**—Dispose per Oregon Department of Environmental Quality standards.
3. **Sensitive area**—Consult the appropriate section of this chapter prior to performing work.
4. **Timing**—Check for optimum seeding/planting time.
5. **Safety**—Follow all safety protocols.
6. **Water quality**—Perform during prolonged dry periods or install temporary erosion and sediment control (TESC) features prior to performing work.

NOTE: Manhole, pipe, or vault entry is confined space. Consult Occupational Safety & Health Administration guidelines.

## Inspection and Maintenance Action Checklist

## Detention Vaults/Tanks/Pipes

Inspection Frequency		Conditions to Check For	Action	Special Considerations	Man hours/ Action (est.)
Storm	Annual				
	X	Sediment and debris exceeding 15% of the vault/tank height or 6" in depth, whichever is less.	Remove and dispose of waste. Contract for cleaning if necessary.	2	1-2 mh/cy
	X	Plugged or blocked air vents. Accumulations of debris or sediment exceed one-half of the vent end area.	Remove and dispose of waste.	2	1-2 mh/cy
	Every 5-yrs	Cracks in joints between tank or pipe sections that leak soil into the facility.	Manually seal all cracks with appropriate grout material. Use professional engineer for evaluation as needed.	5	0.5 mh/cy
	Every 5-yrs	Tank/pipe bent out of shape	Repair or replace tank/pipe to design. Use professional engineer for evaluation as needed.	1, 5	
X	X	Missing or open manhole cover. Locking mechanism difficult to open or lacking more than 1/2 inch of thread; cover difficult to remove.	Replace cover or repair and reinstall. Cover should operate properly and be removed easily by one maintenance person.	None	1-2 mh/cover
X	X	Cleanout shear gate damaged, rusted, not watertight or missing. Gate cannot be adjusted by one person. Chain or rod missing or damaged	Repair or replace to meet design standards. Repair, lubricate, or replace gate as necessary. Repair or replace chain or rod as necessary.	None	1-6 mh/repair
	X	Ladder rungs missing, misaligned rusted or cracked.	Replace rungs or ladder to ensure structural stability and safe access.	5	0.5-1 mh/rung
X	X	Odor, sludge, or unusual color. Presence of flammable chemicals such as natural gas, oil, and gasoline. Presence of any other chemical pollutants.	Notify appropriate city staff to investigate and determine chemical type. Remove contaminant by appropriate methods and dispose of as directed by hazardous waste protocols. Provide sign or stencil as necessary.	2, 5, 6	2-4 mh/cleanup

Water tight in this application shall mean a connection which prevents the flow of running water. Dripping is permissible provided it is less than 2 gallons per hour.

# Inspection and Maintenance Action Checklist

# Ditches/Pipes\*

Inspection Frequency		Conditions to Check For	Action	Special Considerations	Man hours/ Action (est.)
Storm	Annual				
	X	Trash and debris. More than 1 cubic foot (1 garbage can).	Remove and dispose of waste.	2	1 mh/cf
	X	Accumulated sediment exceeds 20% of ditch depth or pipe diameter.	Remove and dispose of waste. Avoid altering ditch geometry unless planned and revegetated.	2	1 mh/cy
	X	Vegetation or roots in pipe reducing free flow of water.	Cut back vegetation or roots manually or contract out. Remove cuttings and dispose of waste.	2	0.5 mh/lf
	X	Weedy shrubs or saplings in ditch reducing free flow of water.	Manually cut or brush-hog. Remove cuttings and dispose of waste. Avoid disturbing soil and grasses.	2	0.5-1 mh/100 sf
	X	Damaged pipe (cracked, rusted, bent, or crushed).	Repair or replace. Evaluate need to upgrade entire system.	1	2-6 mh/lf
X		Erosion on ditch sides or bottom, or banks.	Determine cause of erosion and eliminate. Provide temporary erosion control and consult appropriate county staff for permanent solution.	1	1-2 mh/sf
	X	Rock lining out of place or missing (if applicable).	Replace rock to design level. Determine cause of damage and consult appropriate county staff if necessary for permanent solution.	1	0.5 mh/cy

\* Excluding those used by salmonids.

## Inspection and Maintenance Action Checklist

## Catch Basins and Inlets

Inspection Frequency		Conditions to Check For	Action	Special Considerations	Man hours/ Action (est.)
Storm	Monthly				
X	X	<b>Trash, debris, and sediment on grating.</b> More than 1/2 cu ft in front of or on grating, blocking capacity by more than 10%	Remove and dispose of waste.	2	0.5-1 mh/grate
		<b>Sediment or debris in sump.</b> Depth exceeds 1/2 the distance between the bottom of basin and the invert of lowest pipe into or out of the basin.	Evaluate whether cleaning can be performed manually or mechanically. Perform work or contract out. Record amount of waste collected at each basin.	2	2 mh/sump
		<b>Trash or debris in any inlet or outlet pipe</b> blocking more than 1/3 of its height.	Manually remove or use mechanical equipment such as jet or eductor.	2	1-2 mh/cb
		<b>Structural damage</b> to catch basin frame or top slab: corner extends more than 3/4" past curb face; top slab has holes larger than 2 sq in or cracks wider than 1/4"; frame is 3/4" from flush on top slab	Repair, adjust or replace as necessary to eliminate hazards to street and sidewalk users and ensure that all stormwater flow enters catch basin. Investigate potential for repair work to coincide with road resurfacing.	1	4-8 mh/cb
		<b>Cracks in basin walls or bottom</b> exceeding 1/2" x 1', soil particles entering catch basin through cracks	If basin is structurally sound, patch or repair as necessary. If basin is not deemed structurally sound or cracks are greater than 3' in length, replace to design standards.	1	2-16 mh/cb
		<b>Settlement of basin</b> by more than 1" or rotation of more than 2" from alignment.	Repair, reset, or replace to design standards.	1	8-16 mh/cb
X	X	<b>Odor, sludge, or unusual color.</b> Presence of flammable chemicals such as natural gas, oil, and gasoline. Presence of any other chemical pollutants.	Notify appropriate city staff to investigate and determine chemical type. Remove contaminant by appropriate methods and dispose of as directed by hazardous waste protocols. Provide sign or stencil as necessary.	2, 5	2-4 mh/cleanup
X	X	<b>Vegetation visibly inhibiting flow.</b>	Depending on surrounding land use either cut vegetation or remove. Consult appropriate city staff regarding use of herbicides and timing of applications.	5	0.5-2 mh/cb
	X	<b>Broken grate.</b> Grate has multiple crack or any cracks longer than 2".	Replace Grate	5	

# Inspection and Maintenance Action Checklist

# Culverts

Inspection Frequency		Conditions to Check For	Action	Special Considerations	Man hours/ Action (est.)
Storm	Annual				
	X	Trash, debris, or sediment filling more than 20% of the diameter of the pipe or trash rack or within 25 feet of pipe outlet.	Evaluate whether cleaning can be performed manually or mechanically using an eductor, jet or bucket loader. Perform work or contract out. Record amount of waste collected at each culvert.	2, 3	1-2 mh/cy
X		Vegetation that reduces free movement of water through culvert.	Cut vegetation to 6 inches minimum and remove. Take care to limit damage to embankment and side slopes. Prune back woody vegetation without killing and leaving roots in place if possible.	2	0.5-1 mh/100 sf
	X	Damage to pipe such as rusting of more than 50% of wall area, bent or crushed ends. Major dents that significantly impede flow or decrease cross sectional area of pipe by more than 20% Cracks or tears that allow groundwater seepage	Repair or replace pipe as necessary.	1, 3, 6	1-3 mh/lf
	X	Cracking or buckling of headwall. Erosion or piping occurring at backside or around ends of headwall.	Determine extent of problem and monitor for changes. Contact appropriate county staff for evaluation. Repair or replace as necessary.	1	6-24 mh/headwall
X		Trash rack damaged or missing.	Repair or replace as necessary. Provide means to remove trash rack using ordinary hand tools.	1	4-8 mh/rack
X		Missing rock or riprap within upstream or downstream apron areas or side slopes. Active erosion within area.	Repair eroded areas as necessary. Determine cause of rock movement and replace with similar size rock or larger as necessary.	1	0.5-1 mh/cy

# Inspection and Maintenance Action Checklist Control Structures/Flow Restrictors

Inspection Frequency		Conditions to Check For	Action	Special Considerations	Man hours/ Action (est.)
Storm	Monthly				
		<p><b>Sediment, debris, or trash</b> is blocking or sump is less than 50% from restrictor/orifice plate</p> <p><b>Structural integrity.</b> Tee-type flow restrictor is not securely attached to manhole wall and outlet pipe. Weir or baffle flow restrictor not securely attached to manhole.</p> <p>Flow restrictor is not plumb within 10%</p> <p>Connections to outlet pipe are leaking and show signs of rust</p> <p>Holes in plates, baffles, elbows, etc.</p>	<p>Remove and dispose of waste. Contract for cleaning if necessary.</p> <p>Determine best method for anchoring flow restrictor based on materials and severity of situation. Consult supervisor if necessary.</p> <p>Replumb and realign restrictor, securing as necessary.</p> <p>Repair or replace as necessary to eliminate leakage.</p> <p>Plug or patch holes if structural integrity is not affected.</p> <p>Replace part if possible, replace entire structure if severely failing.</p>	<p>2, 5</p> <p>1, 5</p>	<p>6-12 mh/structure</p> <p>8-16 mh/repair</p>
		<p><b>Cleanout shear gate damaged,</b> rusted, not watertight or missing.</p> <p>Gate cannot be adjusted by one person.</p> <p>Chain or rod is missing or damaged</p>	<p>Repair or replace to meet design standards.</p> <p>Repair, lubricate, or replace gate as necessary.</p> <p>Repair or replace chain or rod as necessary.</p>	<p>none</p>	<p>1-6 mh/repair</p>
X	X	<p><b>Trash, sediment, or debris</b> blocking overflow pipe.</p>	<p>Remove material manually or with mechanical equipment. Contract for cleaning if necessary.</p>	<p>1, 4</p>	<p>4-8 mh/pipe</p>

## Inspection and Maintenance Action Checklist

## Energy Dissipators\*

Inspection Frequency		Conditions to Check For	Action	Special Considerations	Man hours/ Action (est.)
Storm	Annual				
<b>External Energy Dissipator</b>					
	X	Missing layer of rock in area 5 sq ft or larger. Exposed soil.	Replace rock of size and at depth specified. Evaluate need to replace with larger rock.	1	1-2 mh/cy
	X	Broken wires in gabion structure.	Replace rock as necessary and wire shut. Evaluate need to replace structure.	none	0.5-1 mh/sf
<b>Dispersing Trench</b>					
	X	Accumulated sediment in pipe exceeds 20% of design depth.	Vacuum or jet clean pipe, catching or collecting sediment for proper disposal.	2	1-2 mh/cf
	X	Discharge flow is concentrated, not dispersed, causing erosion.	Regrade trench lip to provide "sheet" flow. Evaluate need to redesign and rebuild.	1	0.5-1 mh/lf
	X	Perforated pipe is plugged for half of openings.	Jet clean, catching sediment for proper disposal. Evaluate need to replace pipe.	2	1-2 mh/cf
	X	Stormwater flows out top of distribution manhole or catch basin.	Check outlet pipe for restrictions and clean if necessary. Confirm design storm parameters. Provide erosion control BMPs. Evaluate need to redesign and reconstruct.	1	1-2 mh/sf
	X	Oversaturated receiving area, slope failure; potential for landslide.	Divert flow if possible, stabilize bank using appropriate BMPs.	1	2-6 mh/sf
<b>Manhole Chamber</b>					
	X	Worn or damaged dissipating structure or walls exceed 1 sq ft.	Replace structure to design standards. Evaluate need for alternative design.	1	20-48 mh/structure

\* See also "Catch Basins and Inlets" IMAC

## Inspection and Maintenance Action Checklist

## Grounds Maintenance (Landscaping)

Inspection Frequency		Conditions to Check For	Action	Special Considerations	Man hours/ Action (est.)
Storm	Annual				
	X	Vegetation is overgrown or dominated by weeds.	Trim, prune, and weed to provide appealing aesthetics. Follow County vegetation management guidelines.	none	2-4 mh/100 sf
	X	Weeds occupy more than 20% of the landscaped area.	Remove weeds to less than 5% of the landscaped area.	2	0.5-1 mh/100 sf
	X	Poison ivy, other poisonous vegetation, or insect nests present a safety hazard.	Remove poisonous vegetation or insect nests using best professional judgment of methods and safety precautions.	2, 5	1-2 mh/100 sf
X		Unsanitary accumulation of trash or debris	Remove and dispose of trash or debris.	2	0.5 mh/cf
X		Noticeable erosion such as rills in landscaped areas	Identify cause of erosion. Slow down or spread out surface water flow. Fill, contour, and seed eroded areas.	4	1-2 mh/tree
	X	Limbs or part of trees or shrubs are split or broken, affecting more than 25% of the total foliage of the plant.	Trim or prune trees or shrubs to restore shape. Do not top. Replace severely damaged trees or shrubs.	2	2-4 mh/tree
	X	Trees or shrubs have been blown over or knocked down.	Inspect for injury to stem or roots; replant if possible. Replace if severely damaged.	none	1-2 mh/tree
	X	Trees or shrubs are leaning over, exposing the roots.	Place stakes and rubber-coated ties around young trees or shrubs for support.	none	0.5-1 mh/tree

