

# FLH CULVERT ASSESSMENT FORM

## Overall Rating

Good

Fair

Poor

Critical

Unknown

Performance Problems

Notes by: \_\_\_\_\_ Date: \_\_\_\_\_ Project: \_\_\_\_\_

Measurements by: \_\_\_\_\_ Time: \_\_\_\_\_

### Site Information:

Facility Location: \_\_\_\_\_ Lat/Long \_\_\_\_\_

Milepost: \_\_\_\_\_ Project Station: \_\_\_\_\_ GPS Road CL Waypoint No. \_\_\_\_\_

Named waterway: \_\_\_\_\_ Direction of Flow: \_\_\_\_\_

### Culvert Information:

No. of Barrels: \_\_\_\_\_ Barrel Length (approx): \_\_\_\_\_ Barrel Slope: Mild / Steep / \_\_\_\_\_

Skew (0 degrees = perpendicular to road): \_\_\_\_\_ Approx Cover: Upstream \_\_\_\_\_ Downstream \_\_\_\_\_

Barrel Shape (circle one) Circular Box Elliptical Pipe Arch Arch

Diameter: \_\_\_\_\_ / Span \_\_\_\_\_ x Rise \_\_\_\_\_

Pipe Material (circle one): Metal - Concrete / RCP - Corrugated Plastic - Smooth Plastic - Timber - Masonry

### Appurtenances (circle one):

Upstream : Projecting / Mitered / Headwall / Headwall & Wingwalls / Flared End Section / \_\_\_\_\_

Downstream : Projecting / Mitered / Headwall / Headwall & Wingwalls / Flared End Section / \_\_\_\_\_

Flowing or standing water? N / Y Depth: \_\_\_\_\_ (ft) Est. Flow Velocity: \_\_\_\_\_ (ft/s) Possible AOP/fish passage? Y / N

Utilities Present (list)? Y / N \_\_\_\_\_ Possible historic features? Y / N Open Bottom? Y / N

### Culvert Condition and Performance (circle / check all that apply and provide appropriate explanations below)

Category	Rating					
Invert deterioration	Good	<u>Fair</u>	Poor	Crit	Unk	N/A
Joints & Seams	Good	<u>Fair</u>	Poor	Crit	Unk	N/A
Corrosion / Chemical	Good	Fair	Poor	Crit	<u>Unk</u>	N/A
Cross-Section Deform	<u>Good</u>	Fair	Poor	Crit	Unk	N/A
Cracking	Good	Fair	Poor	Crit	Unk	<u>N/A</u>
Liner / Wall	Good	Fair	<u>Poor</u>	Crit	Unk	N/A
Mortar and Masonry	Good	Fair	Poor	Crit	Unk	<u>N/A</u>
Rot and Marine Borers	Good	Fair	Poor	Crit	Unk	<u>N/A</u>
Headwall/Wingwall	Good	Fair	Poor	Crit	Unk	<u>N/A</u>
Apron	Good	Fair	Poor	Crit	Unk	<u>N/A</u>
Flared End Section	Good	<u>Fair</u>	Poor	Crit	Unk	N/A
Pipe End	Good	Fair	Poor	Crit	Unk	<u>N/A</u>
Scour Protection	Good	<u>Fair</u>	Poor	Crit	Unk	N/A

### Performance Problems Requiring Level 1 Action

- Debris/Veg Blockage > 1/3 of rise at inlet or outlet ☐
- Sediment Blockage 1/3 to 3/4 of rise at inlet/outlet ☐
- Buoyancy or Crushing-Related Inlet Failure ☐
- Poor Channel Alignment ☐
- Previous and/or Frequent Overtopping ☐
- Local Outlet Scour ☐

### Performance Problems Requiring Level 2 Action

- Embankment Piping ☐
- Channel Degradation / Headcut (circle one) ☐
- Embankment Slope Instability ☐
- Sediment Blockage > 3/4 Rise at Inlet or Outlet ☐
- Sediment Blockage > 1/3 Rise Throughout Barrel ☐

### Other Problems Requiring Level 2 Action

- No Access / Ends Totally Buried / Submerged ☐
- Aggressive Abrasion/Corrosion/Chemical (circle) ☐
- Exposed Footing (Open-Bottom Culvert Only) ☐

**Photos (number):** \_\_\_\_\_ Inlet \_\_\_\_\_ Outlet \_\_\_\_\_ Roadway (ahead) \_\_\_\_\_ Roadway (back) \_\_\_\_\_ View downstream

\_\_\_\_\_ View upstream Others: \_\_\_\_\_

### Notes / Recommendations:



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 Kenmore, Wa 98028  
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## Inspection Report / Inspection: 1

Date <b>5/19/2011</b>	P/O. No.	Weather <b>Dry</b>	Surveyor's Name <b>JOEL vASEY</b>	Pipe Segment Reference	Section No. <b>10</b>
Certificate No. <b>u-304-1198</b>	Survey Customer	System Owner	Date Cleaned	Pre-Cleaning <b>No Pre-Cleaning</b>	Sewer Category

Street <b>196+76</b>	Use of Sewer <b>Stormwater</b>	Upstream MH <b>INLET-W</b>
City <b>Port Angeles</b>	Drainage Area	Dowstream MH <b>OUTLET</b>
Loc. details	Flow Control	Dir. of Survey <b>Downstream</b>
Location Code	Length surveyed <b>116.02 ft</b>	Section Length <b>116.02 ft</b>

Purpose of Survey <b>Maintenance Related</b>	Joint Length	<b>24 inch</b>
Year Laid	Dia./Height	<b>Corrugated Metal Pipe</b>
Year Rehabilitated	Material	
Tape / Media No. <b>1</b>	Lining Method	

Add. Information :

1:300	Position	Observation	MPEG	Photo			
	0.00	End of Pipe / INLET-W	00:00:31				
	0.00	Water Level, 5 %of cross sectional area	00:00:38				
	19.60	Infiltration Runner, at 08 o'clock, within 8 inches of joint: YES	00:02:00				
	25.21	Infiltration Stain, at 08 o'clock, within 8 inches of joint: YES	00:03:07				
	40.85	Infiltration Runner, from 12 to 12 o'clock, within 8 inches of joint: YES	00:06:19				
	45.17	Infiltration Stain, at 02 o'clock, within 8 inches of joint: NO	00:06:59				
	49.50	Infiltration Stain, at 02 o'clock, within 8 inches of joint: NO	00:07:39				
	59.80	Infiltration Weeper, at 04 o'clock, within 8 inches of joint: YES	00:08:58				
	64.68	Infiltration Stain, at 08 o'clock, within 8 inches of joint: NO	00:09:38				
	116.02	End of Pipe / OUTLET	00:12:50				
QSR	QMR	SPR	MPR	OPR	SPRI	MPRI	OPRI
0000	4221	0	10	10	0	3.33	3.33