

## **TECHNICAL MEMORANDUM**

DATE: August 1, 2023

TO: Mark Jusayan, Seattle Public Utilities

Ashley Piatek, CenterPoint Properties

FROM: Laura Lee and Tiffany Neier, PE

SUBJECT: South Park Landfill 2023 Annual Landfill Cap Inspection
CC: Julia Schwarz, Washington State Department of Ecology

Ryan Gardiner, Washington State Department of Ecology

**PROJECT NUMBER:** 553-1550-067

**PROJECT NAME:** South Park Landfill Site Coordination

#### INTRODUCTION

The purpose of this Technical Memorandum is to summarize the findings of the 2023 annual landfill cap inspection at South Park Landfill.

The inspection satisfies the requirements of the Cleanup Action Plan which fulfills a requirement of the Consent Decree that was signed on March 26, 2019. The primary objective of this inspection was to reinspect issues identified during the December 2022 mid-year inspection, document current status, and complete another inspection of the landfill cap to identify any additional areas of concern.

The 2023 inspection was performed on April 6, 2023, by Parametrix staff members from approximately 10 a.m. to 2 p.m. The weather was rainy, and the high temperature was around 50°F with heavy rainfall accumulation of approximately 0.53 inches of rain recorded at the King County Hamm Creek Rain Station (HAU2), the majority of which fell after the inspection. Figure 1 shows the approximate bounds of the landfill cap for the two Consent Decree Settlement Area properties and the right-of-way (ROW) as defined in the Cleanup Action Plan. Figure 1 also shows the approximate landfill refuse extent which goes below two additional properties that are not currently included in the Settlement Area. The landfill cover material is shown on Figure 2. Cap Inspection Form A, provided in Appendix A, was completed for the SRDS property, the CenterPoint (former SPPD) property, and the ROW. Photographs were taken using a Trimble DA2 GNSS Receiver which used GPS to tag the photographs. The photographs are included in Tables 1 through 3 with numbered locations mapped on Figures 1 through 5.

The basis of determining the timeline for repairs shown in the tables in this report comes from the Cleanup Action Plan Landfill Post-Closure Operations, Maintenance, and Monitoring Plan, which has the following guidance for the timeline of maintenance/repairs:

- 1. If underlying material (such as geomembrane) is exposed, corrective action shall occur within 60 days.
- 2. If minor cracks or ponding do not expose underlying materials and the problem does not appear to be getting worse the issue shall be reinspected in 6 months.
- 3. If underlying material is not exposed but is worsening or the issue needs to be elevated to a repair before it worsens, the corrective action shall occur within the calendar year.

Corrective actions proposed by the property owners should be coordinated with the Site Coordinator prior to taking action. The Site Coordinator should perform verification inspections during and/or after corrective actions are complete to determine if the maintenance and repairs are consistent with the intent of the regulatory requirements. The property owner should document any repairs or maintenance in Part 1 of the Cap Maintenance Form B and the Site Coordinator will provide observations in Part 2 of the form.

The next cap inspection shall occur in the third quarter of 2023.

#### SRDS PARCEL

The general property conditions observed were good and similar to previous inspections. Locations on the SRDS property identified in December 2022 mid-year inspection were reinspected during this site visit. Two new locations were identified during the 2023 annual inspection. Pavement cracks, ruttings, and ponding areas remain the primary concerns; however, with the planned redevelopment of the property, temporary pavement restoration is not recommended based on conditions at this time, except at locations SRDS AC-13, SRDS AC-14, and SRDS AC-15, which are worsening.

Table 1 describes the issue or concern at each location on the SRDS property, status of repairs or change of condition if applicable, proposes a recommended action, and indicates a timeline for repairs, maintenance, and/or reinspection. Each location of concern is identified by number in Figures 1, 2, and 3, and corresponding photographs are included in Table 1.

Figures 1 and 3 show the SRDS Cleanup Action Plan boundary and the locations of concern. The Cap Inspection Checklist Form A was completed for the SRDS property and is included in Attachment A-1.

#### CENTERPOINT PARCEL

The general property conditions observed were good and similar to previous inspections. Locations on the CenterPoint property identified in the December 2022 mid-year cap inspection were reinspected during this site visit. A few new inspection points were identified in April 2023 and are included in Table 2. The paved area is in good condition, though ponding will continue to be monitored to ensure the depressions do not get deeper, which could indicate asphaltic concrete cap damage. Vegetated slopes are uniform and generally in good condition with some erosion noted in Table 2. The primary concerns are exposed geomembrane at the parking area interface at SPPD G-6, G-7, and G-8 and the growth of vegetation through asphalt near the fences. In addition, there is an open pipe at the G-1 location that had been identified in a previous inspection.

Table 2 describes the issue or concern at each location on the CenterPoint property, status of previous repairs or change of condition if applicable, proposes a recommended action, and indicates a timeline for repairs, maintenance, and/or reinspection. Previous concerns identified primarily remain in the same general condition with improvements at several locations. Each location of concern is identified by number in Figures 1, 2, 4 and 5, and corresponding photographs are included in Table 2.

Figures 1, 4 and 5 show the CenterPoint Cleanup Action Plan boundary and the locations of concern. The Cap Inspection Form A was completed for the CenterPoint property and is included in Attachment A-2.

#### **RIGHT-OF-WAY**

There are three areas in the ROW that were identified as locations of concern in the December 2022 mid-year inspection. These three areas were reinspected along with a new location identified in April 2023. Table 3 describes the issue or concern at each location in the ROW, status of previous repairs or change of condition if applicable, proposes a recommended action, and indicates a timeline for repairs, maintenance, and/or reinspection. Each location of concern is identified by number in Figures 1 and 2, with corresponding photographs included in Table 3.

Figures 1, 3, 4 and 5 show the ROW Cleanup Action Plan boundary and the locations of concern. The Cap Inspection Form A was completed for the ROW and is included in Attachment A-3.

Under the Cleanup Action Plan, routine street maintenance does not require Ecology notification or maintenance reports.

#### **TABLES**

- Table 1. Status of Identified Locations of Concern on the South Park Landfill SRDS Property, April 6, 2023 Reinspection
- Table 2. Status of Identified Locations of Concern on the South Park Landfill CenterPoint Property, April 6, 2023 Reinspection
- Table 3. Status of Identified Locations of Concern in the South Park Landfill Right-of-Way (ROW), April 6, 2023 Reinspection

#### **FIGURES**

- Figure 1. Landfill Cap Inspection Site Plan
- Figure 2. Landfill Cover Material
- Figure 3. April 6, 2023 Landfill Cap Inspection SRDS Property
- Figure 4. April 6, 2023 Landfill Cap Reinspection CenterPoint Property Amazon Tenant
- Figure 5. April 6, 2023 Landfill Cap Reinspection CenterPoint Property First Student Tenant

#### **ATTACHMENTS**

- A April 2023 Cap Inspection Checklists
  - A-1 SRDS Cap Inspection Checklist
  - A-2 CenterPoint Cap Inspection Checklist
  - A-3 ROW Cap Inspection Checklist
- B Maintenance Forms

No Maintenance has been reported since December 2022 Inspection

Tables

Table 1. Status of Identified Locations of Concern on the South Park Landfill SRDS Property, April 06, 2023 Inspection

		December 2022 Insp	ection			April 202	3 Inspection	
SRDS	Description	Conditions Observed and Recommended Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Timeline for Repair and/or Reinspection	Recommended Action Assignment	Photographs
				Α	sphalt Concrete			
AC-1	Minor pavement cracking and ponding	Follow-up inspection	No actions taken or required	No significant changes observed	Follow-up reinspection	6 months	Site Coordinator	
AC-3	Minor pavement cracking and ponding	Follow-up inspection	No actions taken or required	No significant changes observed	Follow-up reinspection	6 months	Site Coordinator	
AC-4	Ponding	Follow-up inspection	No actions taken or required	No significant changes observed	Follow-up reinspection	6 months	Site Coordinator	

Table 1. Status of Identified Locations of Concern on the South Park Landfill SRDS Property, April 06, 2023 Inspection

		December 2022 Insp	ection			April 2023 Inspection Timeline for Repair and/or Reinspection 6 months  Site Coordinator  6 months  Site Coordinator  6 months  Site Coordinator  6 months  Site Coordinator		
SRDS	Description	Conditions Observed and Recommended Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Repair and/or		Photographs
AC-6	Minor pavement cracking and ponding	Additional areas of cracking. Continue to monitor for further deterioration during follow-up reinspection	No actions taken or required	No significant changes observed	Follow-up reinspection	6 months	Site Coordinator	
AC-7	Minor cracking and ponding in repatched area	Visible ponding near vehicle wash area appears related to wash pad. Low spot in pavement is not centered on the nearest storm drain. Ponding depth is less than a few inches. No concerns at this time. Follow-up reinspection	No actions taken or required	No significant changes observed	Follow-up reinspection	6 months	Site Coordinator	
AC-9	Ponding and minor cracking	Follow-up inspection	No actions taken or required	No significant changes observed	Follow-up reinspection	6 months	Site Coordinator	

Table 1. Status of Identified Locations of Concern on the South Park Landfill SRDS Property, April 06, 2023 Inspection

		December 2022 Insp	ection			April 202	3 Inspection	
SRDS	Description	Conditions Observed and Recommended Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Timeline for Repair and/or Reinspection	Recommended Action Assignment	Photographs
AC-10	Minor pavement cracking with grass growing in the cracks	Follow-up inspection	No actions taken or required	No significant changes observed	Follow-up reinspection	6 months	Site Coordinator	
AC-11	Minor cracking with asphalt degrading and ponding	Follow-up inspection	No actions taken or required	No significant changes observed	Ponding in the area. Follow-up reinspection	6 months	Site Coordinator	MCF — E
AC-13	Minor pavement cracking and deep rutting	Observed much deeper rutting. to where soil may be exposed. The open crack should be patched.	No action taken	Worse	The hole is bigger with water accumulation inside the rut. The open hole should be patched.	No later than end of calendar year	SRDS	

Table 1. Status of Identified Locations of Concern on the South Park Landfill SRDS Property, April 06, 2023 Inspection

		December 2022 Insp	ection			April 202	3 Inspection	Photographs
SRDS	Description	Conditions Observed and Recommended Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Timeline for Repair and/or Reinspection	Recommended Action Assignment	Photographs
AC-14	Minor pavement cracks with exposed moss	The spalling has continued to degrade the cap to the point where soil may be exposed. This area should be patched.	No action taken	No significant changes observed	Previous recommendation remains.	No later than end of calendar year	SRDS	
AC-15	Minor pavement cracking with moss growing in the cracks	Follow-up inspection	No actions taken or required	Worse	Observed more grass growing in the entire cracked areas. This area should be patched.	No later than end of calendar year	SRDS	
AC-16	Minor pavement cracking and ponding	Follow-up inspection	No actions taken or required	Worse	Follow-up reinspection	6 months	Site Coordinator	

Table 1. Status of Identified Locations of Concern on the South Park Landfill SRDS Property, April 06, 2023 Inspection

		December 2022 Insp	ection			April 202	3 Inspection	
SRDS	Description	Conditions Observed and Recommended Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Timeline for Repair and/or Reinspection	Recommended Action Assignment	Photographs
AC-17	Ponding	Follow-up inspection	No actions taken or required	No significant changes observed	Follow-up reinspection	6 months	Site Coordinator	
AC-18	Ponding	Follow-up inspection	No actions taken or required	No significant changes observed	Follow-up reinspection	6 months	Site Coordinator	
AC-19	Minor cracks in asphalt with ponding			New location	Follow up reinspection	6 months	Site Coordinator	

Table 1. Status of Identified Locations of Concern on the South Park Landfill SRDS Property, April 06, 2023 Inspection

		December 2022 Insp	ection			April 202	3 Inspection	
SRDS	Description	Conditions Observed and Recommended Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Timeline for Repair and/or Reinspection	Recommended Action Assignment	Photographs
AC-20	Open pipe in the ground			New location	Determine what the pipe is and cap it.	No later than end of calendar year	SRDS	
			T		r Management Facilities		T	
SW-4	Potential run-on from SPPD	Follow-up inspection	No actions taken or required	No significant changes observed	Follow-up reinspection	6 months	Site Coordinator	

**Notes:** Locations with recommended repairs or action items are in **BOLD** text. NA = Not applicable

Table 2. Status of Identified Locations of Concern on the South Park Landfill CenterPoint (Former SPPD) Property, April 6, 2023 Inspection

	1							
Center		December 2022 Inspec	ction			April 202	3 Inspection	
Point (SPPD) Location	Description	Conditions Observed and Recommended Action	Action Taken	Condition Status	Conditions Observed and Recommended  Action	Timeline for Repair and/or Reinspection	Recommended Action Assignment	Photographs
				<u> </u>	halt Concrete		The state of the s	· · · · · · · · · · · · · · · · · · ·
AC-1	Ponding	Follow-up inspection	No actions taken or required		Follow-up reinspection	6 months	Site Coordinator	SCHOLEUS COLLEGE COLLE
AC-3	New buildings, potential cap penetrations.	There is one hole from where the previous building was that needs to have the seal fixed. An uncapped pipe protruding from the asphalt needs to be capped or filled and sealed.  Property owner should request Occupancy Permit from tenant which would include drawings for the new buildings.	Holes have been sealed. Pipe is still not capped. No maintenance form was submitted.	Some improvement	Previous recommended action regarding open pipe remains.	60 days	CenterPoint	

Table 2. Status of Identified Locations of Concern on the South Park Landfill CenterPoint (Former SPPD) Property, April 6, 2023 Inspection

Center		December 2022 Inspe	ection			April 202	3 Inspection	
Point (SPPD) Location	Description	Conditions Observed and Recommended Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Timeline for Repair and/or Reinspection	Recommended Action Assignment	Photographs
AC-4	Ponding	Follow-up inspection	No actions taken or required	No significant changes observed.	A larger extent of ponding observed due to rainfall accumulation.  Follow-up reinspection	6 months	Site Coordinator	
AC-5	Ponding, modification of asphalt	Follow-up inspection	No actions taken or required	No significant changes observed	Follow-up reinspection	6 months	Site Coordinator	
AC-6	Gaps and holes in electric fence post holes and ponding	Seal the remaining gaps in the interface between the posts of the new electric fence and the asphalt  There are still some electric fence posts that have not been completely sealed, especially around the back of the pipe where it would be hard to reach. There are also some holes that were drilled next to the installed post. All posts and holes need to have complete seals.		No visible improvement	Previous recommended repairs remain.	No later than end of calendar year	CenterPoint	

Table 2. Status of Identified Locations of Concern on the South Park Landfill CenterPoint (Former SPPD) Property, April 6, 2023 Inspection

Center		December 2022 Inspe	ection			April 202	3 Inspection	
Point (SPPD) Location	Description	Conditions Observed and Recommended Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Timeline for Repair and/or Reinspection	Recommended Action Assignment	Photographs
AC-7	Several areas of ponding	Follow-up inspection	No actions taken or required	No significant changes observed	Ponding in larger extent observed due to rainfall accumulation.  Follow-up reinspection	6 months	Site Coordinator	
AC-8	Ponding	Follow-up inspection	No actions taken or required	No significant changes observed	Follow-up reinspection	6 months	Site Coordinator	

Table 2. Status of Identified Locations of Concern on the South Park Landfill CenterPoint (Former SPPD) Property, April 6, 2023 Inspection

Conton		December 2022 Inspe	ection			Anril 202	3 Inspection	
Center Point	1					Timeline for		
(SPPD) Location	Description	Conditions Observed and Recommended Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Repair and/or Reinspection	Recommended Action Assignment	Photographs
AC-9	Ponding	Follow-up inspection	No actions taken or required	No significant changes observed	Ponding in larger extent observed due to rainfall accumulation.  Follow-up reinspection	6 months	Site Coordinator	
AC-10	Ponding	Follow-up inspection	No actions taken or required	No significant changes observed	Follow-up reinspection	6 months	Site Coordinator	

Table 2. Status of Identified Locations of Concern on the South Park Landfill CenterPoint (Former SPPD) Property, April 6, 2023 Inspection

Center		December 2022 Inspec	tion			April 202	3 Inspection	
Point (SPPD) Location	Description	Conditions Observed and Recommended Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Timeline for Repair and/or Reinspection	Recommended Action Assignment	Photographs
AC-11	Ponding	Follow-up inspection	No actions taken or required	No significant changes observed	Follow-up reinspection	6 months	Site Coordinator	d X
AC-12	Ponding	Follow-up inspection	No actions taken or required	No significant changes observed	Follow-up reinspection	6 months	Site Coordinator	

Table 2. Status of Identified Locations of Concern on the South Park Landfill CenterPoint (Former SPPD) Property, April 6, 2023 Inspection

				1				
Center		December 2022 Inspect	ion			April 202	3 Inspection	
Point						Timeline for		
(SPPD)		Conditions Observed and Recommended		Condition		Repair and/or	Recommended	
		Action	Action Taken					Photographs
(SPPD) Location AC-13	Description Blackberry shrubs growth and stagnated water behind the concrete blocks	Conditions Observed and Recommended Action	Action Taken	Condition Status New Location	Conditions Observed and Recommended Action  Remove blackberry shrubs and clear pathways to allow proper water flow into the storm drains	Repair and/or Reinspection  No later than end of calendar year	Recommended Action Assignment CenterPoint	Photographs

Table 2. Status of Identified Locations of Concern on the South Park Landfill CenterPoint (Former SPPD) Property, April 6, 2023 Inspection

Center		December 2022 Inspection			April 2023 Inspection					
Point (SPPD) Location	Description	Conditions Observed and Recommended Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Timeline for Repair and/or Reinspection	Recommended Action Assignment	Photographs		
	Ponding			New Location	Follow-up reinspection	6 months	Site Coordinator	The control of the co		

Table 2. Status of Identified Locations of Concern on the South Park Landfill CenterPoint (Former SPPD) Property, April 6, 2023 Inspection

Center		December 2022 Inspect	tion			April 202	23 Inspection	
Point (SPPD) Location	Description	Conditions Observed and Recommended Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Timeline for Repair and/or Reinspection	Recommended Action Assignment	Photographs
AC-15	Minor Cracking			New Location	Follow-up reinspection	6 months	Site Coordinator	
AC-17	Ponding			New location	Large area of ponding observed.  Follow-up reinspection	6 months	Site Coordinator	
AC-18	Ponding			New location	Large area of ponding observed.  Follow-up reinspection	6 months	Site Coordinator	

Table 2. Status of Identified Locations of Concern on the South Park Landfill CenterPoint (Former SPPD) Property, April 6, 2023 Inspection

		1							
Center		December 2022 Inspecti	ion				3 Inspection		
Point (SPPD) Location	Description	Conditions Observed and Recommended Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Timeline for Repair and/or Reinspection	Recommended Action Assignment	Photographs	
AC-19	Holes near fence allowing growth of grasses			New location	Remove plants and seal cap penetrations.	No later than end of calendar year	CenterPoint		
AC-20	Minor cracks and failed patch			New location	Follow-up reinspection	6 months	Site Coordinator		
AC-21	Holes near fence allowing growth of invasive plants & ponding presence			New location	Remove plants and seal cap penetrations.	No later than end of calendar year	CenterPoint		

Table 2. Status of Identified Locations of Concern on the South Park Landfill CenterPoint (Former SPPD) Property, April 6, 2023 Inspection

Center		December 2022 Inspec	tion	April 2023 Inspection						
Point (SPPD) Location	Description	Conditions Observed and Recommended Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Timeline for Repair and/or Reinspection	Recommended Action Assignment	Photographs		
AC-22	Holes near concrete post allowing invasive plant growth			New location	Remove plants and seal cap penetrations.	No later than end of calendar year	CenterPoint			
G-1	An open pipe present	Pipes remain present. The origin and use of the pipes protruding from the ground needs to be investigated. Once the information about the pipe is known appropriate actions should be taken to ensure the integrity of the cap.	Action Not Yet Completed	No change	Need investigation of this open pipe and action should be taken to cap it, if it does not have any purpose.	No later than end of calendar year	CenterPoint	FREST & LIGHT		

Table 2. Status of Identified Locations of Concern on the South Park Landfill CenterPoint (Former SPPD) Property, April 6, 2023 Inspection

Center		December 2022 Inspection			April 2023 Inspection					
Point (SPPD) Location	Description	Conditions Observed and Recommended Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Timeline for Repair and/or Reinspection	Recommended Action Assignment	Photographs		
G-3	Loss of vegetation and minimal erosion of soil	Minimal erosion of soil, netting from vegetation correction is visible. Geomembrane is not exposed. Reinspect every 6 months. If loss of vegetation or erosion exposes the geomembrane, the actions recommended in the 2021 annual inspection should be taken.	No actions taken or required	Improved	Improved vegetation.  Follow-up reinspection	6 months	Site Coordinator			

Table 2. Status of Identified Locations of Concern on the South Park Landfill CenterPoint (Former SPPD) Property, April 6, 2023 Inspection

Center					April 2023 Inspection						
Point (SPPD) Location	Description	Conditions Observed and Recommended Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Timeline for Repair and/or Reinspection	Recommended Action Assignment	Photographs			
G-4	Loss of grass cover along with blackberry shrubs growth in the area	April 2022 recommendations remain. Blackberry shrubs have been introduced to the area since the April 2022 inspection. Remove blackberries before the roots spread and become invasive, may need to re-seed the grass.	Action Not Yet Completed	Worse	Loss of grass around the concrete post exposing the soil and growth of blackberry shrubs around the region.  Remove the blackberry shrubs before the roots spread and re-seed the grass.	No later than end of calendar year	CenterPoint				

Table 2. Status of Identified Locations of Concern on the South Park Landfill CenterPoint (Former SPPD) Property, April 6, 2023 Inspection

Center		December 2022 Inspe	ection			April 202	3 Inspection	
Point (SPPD) Location	Description	Conditions Observed and Recommended  Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Timeline for Repair and/or Reinspection	Recommended Action Assignment	Photographs
G-5	New grass cover over previously exposed geomembrane	See Location G-4 2022 recommendations.	Action Not Yet Completed	Improved	Follow-up reinspection	6 months	Site Coordinator	
G-6	Geomembrane exposed in one area	See Location G-4 2022 recommendations.	Action Not Yet Completed	Some Improvement	Improved vegetation. Exposed geomembrane remains in one area. Add soil to exposed geomembrane and reseed grasses	60 days	CenterPoint will work in coordination with Site Coordinator to establish a solution	

Table 2. Status of Identified Locations of Concern on the South Park Landfill CenterPoint (Former SPPD) Property, April 6, 2023 Inspection

Conton		December 2022 Inspe	ction					
Center Point (SPPD) Location	Description	Conditions Observed and Recommended  Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Timeline for Repair and/or Reinspection	Recommended Action Assignment	Photographs
G-7	Exposed and damaged geomembrane at the parking area interface	The geomembrane remains exposed at G 7 and G-10. These locations are of the highest concern due to the potential compromise of the landfill cap. The configuration of the geomembrane and cover at the interface of the parking area does not appear to be in accordance with Figure 5 of the Interim Action Work Plan (IAWP). The geomembrane appears to be directly below the asphalt with no drainage layer or surfacing layer in between. Along with Site Coordinator, prepare a plan to reestablish cover over the geomembrane. Most likely, the area should be exposed, and the geomembrane tested for damage before repairs are be made. The crest of slope should then be provided cover to the maximum extent possible considering the existing asphalt and curb configuration	Action Not Yet Completed	Some improvement	Improved growth of grasses over the geomembrane. Exposed geomembrane remains. Add soil to exposed geomembrane and re-seed grasses. Previous recommendations remain.	60 days	CenterPoint will work in coordination with Site Coordinator to establish a solution	
G-8	Exposed geomembrane around utility access hole	Work with Site Coordinator to prepare a plan to re-establish cover over the geomembrane. The geomembrane should be carefully exposed so as to not damage the geomembrane and inspected to determine if it is excess material or part of the cover. Make repairs as necessary and install adequate cover soil in accordance with the IAWP.	No documentation of actions taken	Improved	Improved vegetation. Previous recommendations remain	60 days	CenterPoint will work in coordination with Site Coordinator to establish a solution	

Table 2. Status of Identified Locations of Concern on the South Park Landfill CenterPoint (Former SPPD) Property, April 6, 2023 Inspection

Center		December 2022 Inspe	ection			April 202	3 Inspection	
Point (SPPD) Location	Description	Conditions Observed and Recommended Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Timeline for Repair and/or Reinspection	Recommended Action Assignment	Photographs
G-10	Exposed and damaged geomembrane at the parking area interface.	See Location G-4 2022 recommendations.	No documentation of actions taken	Improved	No exposed or damaged geomembrane visible during inspection. Poor growth of vegetation in this area.  Follow-up reinspection	6 months	Site Coordinator	
G-11	Bare Patch			New location	Re-establish vegetated cover	No later than end of calendar year	CenterPoint	
G-12	Poor vegetative cover			New location	Areas of exposed soil. Grass should be re-seeded.	No later than end of calendar year	CenterPoint	

Table 2. Status of Identified Locations of Concern on the South Park Landfill CenterPoint (Former SPPD) Property, April 6, 2023 Inspection

	December 2022 Inspection			April 2023 Inspection						
Center	1	December 2022 Inspec	tion		T		3 inspection	T		
Point (SPPD) Location	Description	Conditions Observed and Recommended Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Timeline for Repair and/or Reinspection	Recommended Action Assignment	Photographs		
G-13	Grass growing unevenly. The upper portion of the slope has started to slough off.			New location	If this condition worsens take appropriate steps for prevention of sloughing.  Follow-up reinspection	6 months	CenterPoint/Site Coordinator			
				Stormwater	Management Facilities					
SW-1	Standing water	The swale does not meet City of Seattle Stormwater Manual requirement for a biofiltration swale to have a minimum slope of 1.5%. Bottom channel should be regraded to the intended 1.5% slope. Along with Site Coordinator, prepare a plan to address this situation.	Action Not Yet Completed.	No Significant Change Observed	Previous recommended actions remain.	No later than end of calendar year	CenterPoint will work in coordination with Site Coordinator to establish a solution			

Table 2. Status of Identified Locations of Concern on the South Park Landfill CenterPoint (Former SPPD) Property, April 6, 2023 Inspection

Center		December 2022 Inspect	ion			April 202	3 Inspection	
Point (SPPD) Location	Description	Conditions Observed and Recommended Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Timeline for Repair and/or Reinspection	Recommended Action Assignment	Photographs
SW-2	Invasive/Deep Rooted Plants	The willow (salix sp.) and black cottonwood (populus balsamifera) growing along the edge of the west bioswale are native but deeprooted species that should be removed so that it does not damage the geomembrane on that side. This recommendation remains from April 2022.	Action Not Yet Completed	No Significant Change Observed	Previous recommendations remain	No later than end of calendar year	CenterPoint	

**Notes:** Locations with recommended repairs or action items are in **BOLD** text. NA = Not applicable

Table 3. Status of Identified Locations of Concern on the South Park Landfill Right-of-Way Property, April 6, 2023 Inspection

December 2022 Inspection   April 2023 Inspection   Conditions Observed and Recommended   Action Taken   Action   Actio		1						
ROW Location Description Action Action Action Action Condition Status Conditions Observed and Recommended Action Action Repair and/or Reinspection Action Assignment Photographs  AC-1 Cracks and pavement repair large open cracks and ruts in the asphalt pavement. SDOT previously repaired a portion of this location but did not cover the entire area. Recommend coordination			December 2022 Insp	ection		April 202	3 Inspection	
AC-1 Cracks and pavement repair Roadway is in poor condition, there are large open cracks and ruts in the asphalt pavement. SDOT previously repaired a portion of this location but did not cover the entire area. Recommend coordination  Asphalt Concrete  Worse Cracks got worse with ponding. Repair/repatching should be coordinated with SDOT  With SDOT  Worse Cracks got worse with ponding. Repair/repatching should be coordinated with SDOT		Description		Action Taken		Repair and/or		Photographs
AC-1 Cracks and pavement repair large open cracks and ruts in the asphalt pavement. SDOT previously repaired a portion of this location but did not cover the entire area. Recommend coordination		·				·		
	AC-1	Cracks and pavement repair	large open cracks and ruts in the asphalt pavement. SDOT previously repaired a portion of this location but did not cover the entire area. Recommend coordination	No action taken	Cracks got worse with ponding. Repair/repatching should be coordinated	60 days		

Table 3. Status of Identified Locations of Concern on the South Park Landfill Right-of-Way Property, April 6, 2023 Inspection

		December 2022 Insp	ection			April 202	3 Inspection	
ROW Location	Description	Conditions Observed and Recommended Action	Action Taken	Condition Status	Conditions Observed and Recommended Action	Timeline for Repair and/or Reinspection	Recommended Action Assignment	Photographs
AC-2	Asphalt open cracking	Follow-up inspection	No action taken or required	Worse	Cracks got bigger with ponding. Repatching should be coordinated with SDOT	No later than end of calendar year	SPU to coordinate with SDOT	Test Blader(F)
AC-3	Asphalt cracking and potholes alongside of street	Pothole appears to be getting worse and should be patched to prevent further erosion.	No action taken	No Significant Change Observed	Previous recommendations remain.	No later than end of calendar year	SPU to coordinate with SDOT	

Table 3. Status of Identified Locations of Concern on the South Park Landfill Right-of-Way Property, April 6, 2023 Inspection

		December 2022 Inspe	ection			April 202	3 Inspection	
ROW	Description	Conditions Observed and Recommended	Action Taken	Condition Status	Conditions Observed and Recommended	Timeline for Repair and/or	Recommended	Dhatagrapha
AC-4	Description  Potholes in the middle of roadway	Action	ACTION TAKEN	New location	Action  Repatch work should be arranged with SDOT	Reinspection  No later than end of calendar year	Action Assignment SPU to coordinate with SDOT	Photographs

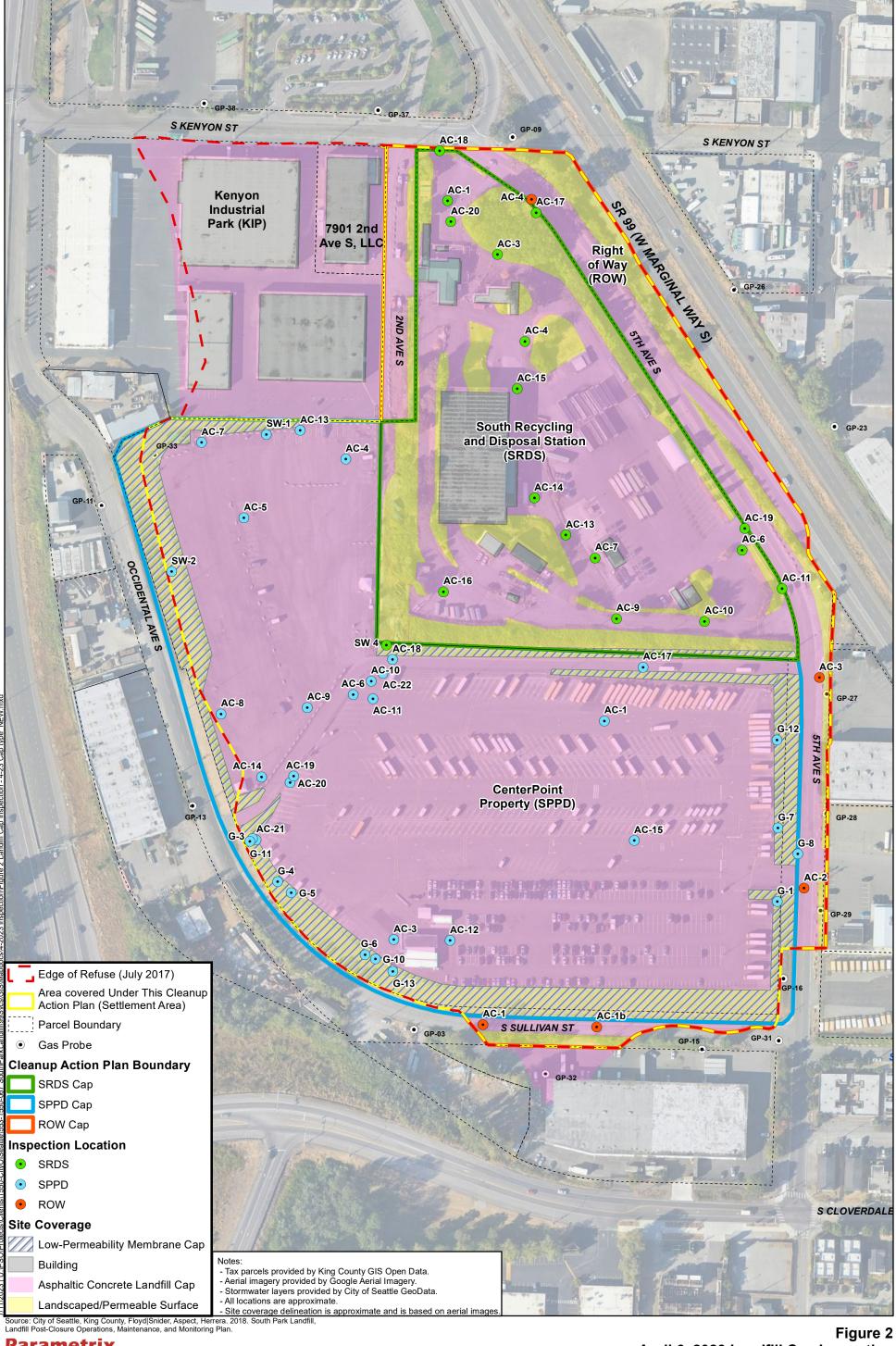
 $\textbf{Notes:} \ Locations \ with \ recommended \ repairs \ or \ action \ items \ are \ in \ \textbf{BOLD} \ text.$ 

Figures

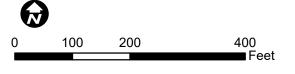


**Parametrix** 

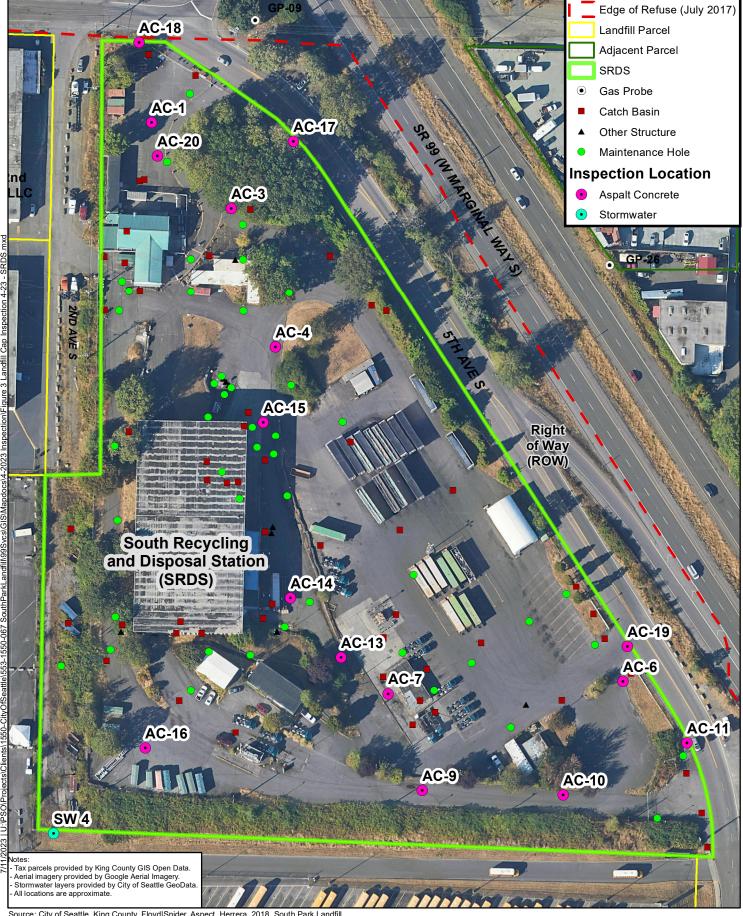
100 200 400 Feet Figure 1
April 6, 2023 Landfill Cap Inspection
Site Plan
South Park Landfill
Seattle, WA



**Parametrix** 



April 6, 2023 Landfill Cap Inspection **Landfill Cover Material** South Park Landfill Seattle, WA



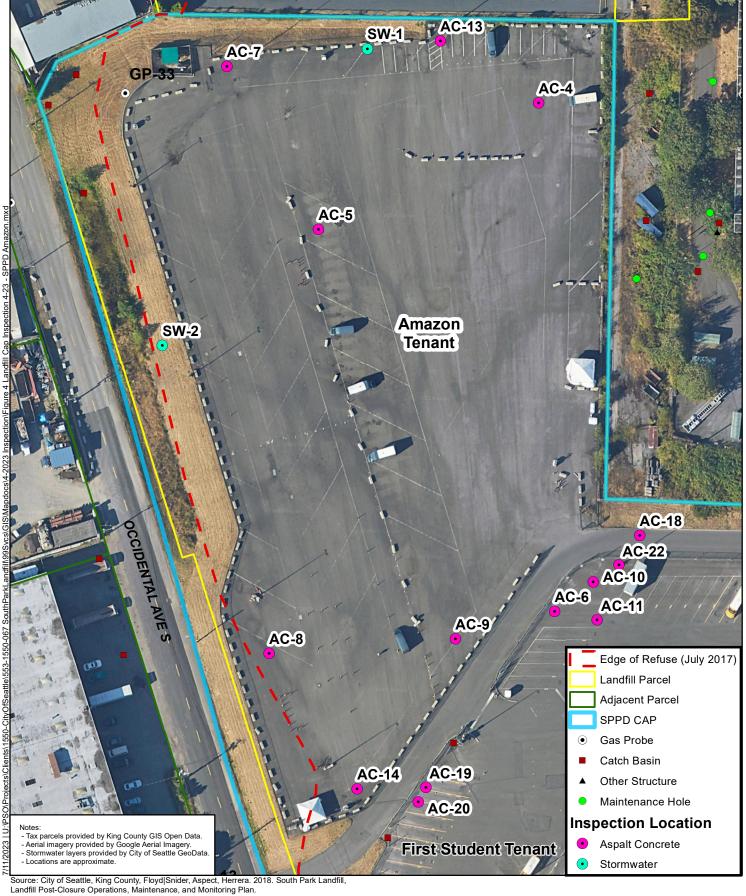
Source: City of Seattle, King County, Floyd|Snider, Aspect, Herrera. 2018. South Park Landfill, Landfill Post-Closure Operations, Maintenance, and Monitoring Plan.

## **Parametrix**

0 50 100 200 Feet



Figure 3
April 6, 2023 Landfill Cap Inspection
SRDS Property
South Park Landfill
Seattle, WA



#### Parametrix

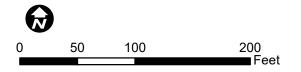


Figure 4 April 6, 2023 Landfill Cap Inspection **CenterPoint Property - Amazon Tenant** South Park Landfill Seattle, WA



Source: City of Seattle, King County, Floyd|Snider, Aspect, Herrera. 2018. South Park Landfill, Landfill Post-Closure Operations, Maintenance, and Monitoring Plan.

#### **Parametrix**



Figure 5
April 6, 2023 Landfill Cap Inspection
CenterPoint Property - First Student Tenant
South Park Landfill
Seattle, WA

Attachment A

April 2023 Cap Inspection Checklists

A-1
SRDS Cap Inspection Checklist



# SOUTH PARK LANDFILL CAP INSPECTION FORM A

Date:	Apr	il 6, 2023				Parcel Owne	er: 🖂 S	RDS		
Inspector(s):	Tiffa	any Neier, Amanda	Weiss	5			□c	enterPoint	(former SI	PPD)
							□R	ight-of-Wa	у	
Type of Inspect	ion:		□ Re	einspection	1					
		☐ Non-Routine	Reas	son:						
Last Rain Event	befor	e Daily precip	itation c	bservations f	from King	County Hamm (	Creek Rain St	ation (HAU2)		
Inspection:		Source: <u>https:</u>	//green2	.kingcounty.go	v/hydrolog	y/DataDownload	.aspx?G ID=1	517&Paramete	er=Precipitation	<u>1</u>
				03/31/23	04/01/2	3 04/02/23	04/03/23	04/04/23	04/05/23	04/06/23
		Precipitation	n (in)	0.4	0.01	0.31	0.19	0.01	0.0	0.53

### **VISUAL INSPECTION CHECKLIST**

	-	Aspha	It Concrete	
	Yes	No	Needs Repair	If yes, describe:
Minor cracking	$\boxtimes$		$\boxtimes$	Locations SRDS AC-1, AC-3, AC-6, AC-7, AC-9,
				AC-10, AC-11 AC-13, AC-14, AC-15, AC-16,
				AC-19
				See Table 1 for details
Open cracks/ruts	$\boxtimes$		$\boxtimes$	Locations SRDS AC-13, AC-16, AC-20
				See Table 1 for details
Differential settlement		$\boxtimes$		
Potholes		$\boxtimes$		
Pooling or ponding	$\boxtimes$			Locations SRDS AC-1, AC-3, AC-4, AC-6, AC-7,
				AC-9, AC-11, AC-13, AC-16, AC-17, AC-18,
				AC-19
				See Table 1 for details
Separation of pavement from curbs,		$\boxtimes$		
gutters, or catch basins				
Sloughing or crumbling of edge materials		$\boxtimes$		
Erosion		$\boxtimes$		
Other signs of cap damage, failure, or		$\boxtimes$		
disturbance				
Recommended Maintenance or Repair Ty	ne/Lo	cation:		
	PC/ 20			
See Table 1 for recommended actions.				



## **VISUAL INSPECTION CHECKLIST (continued)**

Lo	w-Peri	meab	ility Geomem	brane
	Yes	No	Needs Repair	If yes, describe:
Erosion of cover soil		$\boxtimes$		
Exposed geotextile		$\boxtimes$		
Holes/signs of unauthorized digging		$\boxtimes$		
Poor vegetative cover		$\boxtimes$		
Exposed geomembrane		$\boxtimes$		
Sto	rmwat	er Ma	anagement Fa	acilities
	Yes	No	Needs Repair	If yes, describe:
Signs of water infiltration below structures		$\boxtimes$		, ,
Erosion of soil		$\boxtimes$		
Exposed geotextile membrane		$\boxtimes$		
Holes/signs of unauthorized digging		$\boxtimes$		
Invasive/deep-rooted plants		$\boxtimes$		
Poor vegetative cover				
		$\boxtimes$		

Attach necessary documentation such as photographs, sketches, and additional notes.

See Table 1, figures and inspection photos included in the cap inspection report.

**Recommended Maintenance or Repair Type/Location:** 

See Table 1 for recommended actions.

A-2
CenterPoint Cap Inspection Checklist



# SOUTH PARK LANDFILL CAP INSPECTION FORM A

Date:	Apri	1 6, 2023				Parce	el Owne	er:	SRDS		
Inspector(s):	Tiffa	any Neier, Amanda	Weiss					$\boxtimes$	CenterPoint	(former SI	PPD)
									Right-of-Wa	У	
Type of Inspecti	on:	□ Annual	□ Re	einspection	1						
		$\square$ Non-Routine	Reas	on:							
Last Rain Event	befor	e Daily precipi	tation o	bservations f	rom King	County	Hamm (	Creek Rain	Station (HAU2)		
Inspection:		Source: <u>https:</u>	//green2.	.kingcounty.go	v/hydrolog	gy/Datai	<u>Download.</u>	.aspx?G ID=	<u>1517&amp;Paramete</u>	r=Precipitation	<u>1</u>
				03/31/23	04/01/2	23 04	1/02/23	04/03/23	04/04/23	04/05/23	04/06/23
		Precipitation	(in)	0.4	0.01		0.31	0.19	0.01	0.0	0.53

### **VISUAL INSPECTION CHECKLIST**

	-	Aspha	It Concrete	
	Yes	No	Needs Repair	If yes, describe:
Minor cracking	$\boxtimes$			Location SPPD-AC-15, AC-20
Open cracks/ruts	$\boxtimes$		$\boxtimes$	Locations SPPD AC-6, AC-19,AC-21,AC-22
				See Table 2 for details
Differential settlement		$\boxtimes$		
Potholes		$\boxtimes$		
Pooling or ponding	$\boxtimes$		$\boxtimes$	Locations SPPD AC-1, AC-4, AC-5, AC-6, AC-7,
				AC-8, AC-9, AC-10, AC-11, AC-12, AC-13,
				AC-14, AC-17, and AC-18
				See Table 2 for details
Separation of pavement from curbs,		$\boxtimes$		
gutters, or catch basins				
Sloughing or crumbling of edge materials		$\boxtimes$		
Erosion		$\boxtimes$		
Invasive plant growth	$\boxtimes$		$\boxtimes$	Locations SPPD AC-13, AC-19, AC-21 and
				AC-22
				See Table 2 for details
Other signs of cap damage, failure, or	$\boxtimes$		$\boxtimes$	Location SPPD AC-3
disturbance				See Table 2 for details
December of the second of the	/1 -	!		
Recommended Maintenance or Repair Ty	/pe/Lo	cation:		
See Table 2 for recommended actions.				



# **VISUAL INSPECTION CHECKLIST (continued)**

Lo	w-Perr	neab	ility Geomem	brane
	Yes	No	Needs Repair	If yes, describe:
Erosion of cover soil	$\boxtimes$			Location SPPD G-3
				See Table 2 for details
Exposed geotextile		$\boxtimes$		
Holes/signs of unauthorized digging		$\boxtimes$		
Poor vegetative cover	$\boxtimes$		$\boxtimes$	Locations SPPD G-4, G-5, G-10, G-11, G-12
				See Table 2 for details
Exposed geomembrane	$\boxtimes$		$\boxtimes$	Locations SPPD G-6, G-7, G-8
				See Table 2 for details
Soil Sloughing	$\boxtimes$			Location SPPD G-13
				See Table 2 for details
Recommended Maintenance or Repair 1 See Table 2 for recommended actions.	Гуре/Loo	cation:		

Stor	mwat	er Ma	anagement Fa	acilities
	Yes	No	Needs Repair	If yes, describe:
Signs of water infiltration below		$\boxtimes$		
structures				
Erosion of soil		$\boxtimes$		
Exposed geotextile membrane		$\boxtimes$		
Holes/signs of unauthorized digging		$\boxtimes$		
Invasive/deep-rooted plants	$\boxtimes$		$\boxtimes$	Location SPPD SW-2
				See Table 2 for details
Poor vegetative cover		$\boxtimes$		
Incorrect drainage path or not draining	$\boxtimes$		$\boxtimes$	Location SPPD SW-1
				See Table 2 for details
Recommended Maintenance or Repair To See Table 2 for recommended actions.	ype/Lo	cation:		

Attach necessary documentation such as photographs, sketches, and additional notes.

See Table 2, figures and inspection photos included in the cap inspection report.

A-3
ROW Cap Inspection Checklist



# SOUTH PARK LANDFILL CAP INSPECTION FORM A

Date:	Apr	il 6, 2023				Parcel Owr	ner:	☐ SF	RDS		
Inspector(s):	Tiffa	any Neier, Amanda	Weiss					□ Ce	enterPoint	(former SI	PPD)
								⊠ Ri	ght-of-Wa	У	
Type of Inspecti	on:		⊠ Re	inspection							
		$\square$ Non-Routine	Reas	on:							
Last Rain Event	befor	e Daily precipi	tation o	bservations f	rom King	County Hamm	Creek	Rain Sta	ation (HAU2)		
Inspection:		Source: <u>https:</u> ,	<u>//green2.</u>	.kingcounty.go	v/hydrolog	y/DataDownloo	ad.aspx?	G ID=15	17&Paramete	r=Precipitation	<u>1</u>
				03/31/23	04/01/2	23 04/02/23	04/0	03/23	04/04/23	04/05/23	04/06/23
		Precipitation	(in)	0.4	0.01	0.31	0	.19	0.01	0.0	0.53

### **VISUAL INSPECTION CHECKLIST**

	ļ	Aspha	It Concrete	
	Yes	No	Needs Repair	If yes, describe:
Minor cracking	$\boxtimes$			Locations ROW AC-1
				See Table 3 for details
Open cracks/ruts	$\boxtimes$		$\boxtimes$	Locations ROW AC-1, AC-2,
				See Table 3 for details
Differential settlement		$\boxtimes$		
Potholes	$\boxtimes$		$\boxtimes$	Locations ROW AC-1, AC-3, AC-4
				See Table 3 for details
Pooling or ponding		$\boxtimes$		
Separation of pavement from curbs,		$\boxtimes$		
gutters, or catch basins				
Sloughing or crumbling of edge materials		$\boxtimes$		
Erosion		$\boxtimes$		
Other signs of cap damage, failure, or		$\boxtimes$		
disturbance				
Recommended Maintenance or Repair Ty See Table 3 for recommended actions.	pe/Loc	cation:		



# **VISUAL INSPECTION CHECKLIST (continued)**

201				brane
	Yes	No	Needs Repair	If yes, describe:
Erosion of cover soil				Not applicable to ROW.
Exposed geotextile				Not applicable to ROW.
Holes/signs of unauthorized digging				Not applicable to ROW.
Poor vegetative cover				Not applicable to ROW.
Exposed geomembrane				Not applicable to ROW.
Chou		- NA		
Stor			anagement Fa	
	mwat Yes	er Ma	anagement Fa	If yes, describe:
Signs of water infiltration below structures				
Signs of water infiltration below				If yes, describe:
Signs of water infiltration below structures	Yes	No	Needs Repair	If yes, describe: Not applicable to ROW.
Signs of water infiltration below structures Erosion of soil	Yes	No	Needs Repair	If yes, describe: Not applicable to ROW. Not applicable to ROW.
Signs of water infiltration below structures Erosion of soil Exposed geotextile membrane	Yes	No	Needs Repair	If yes, describe:  Not applicable to ROW.  Not applicable to ROW.  Not applicable to ROW.
Signs of water infiltration below structures Erosion of soil Exposed geotextile membrane Holes/signs of unauthorized digging	Yes	No	Needs Repair	If yes, describe:  Not applicable to ROW.  Not applicable to ROW.  Not applicable to ROW.  Not applicable to ROW.

Attach necessary documentation such as photographs, sketches, and additional notes.

See Table 3, figures and inspection photos included in the cap inspection report.

Attachment B Maintenance Forms

No Maintenance Reported