	Environmental Monitor Construction Site Inspection Report MassDOT Project #608164 Construction Contract # 119678 EM Report #26					
Permit Description(s): Order of Condition	ns (MGL Chapter 131, Section 40 and		n: Bruce Freeman Rail Trail Right-oi 301-1362); 2022 EPA NPDES Genera 01975.		truction Areas; U.S. Army Corps of I	Engineers Permit No NAE-2021-
		I. Ger	neral Project Information			
Project Name:	Bruce Freeman Rail Trail - Phase 2d -	Sudbury				
Date of Inspections:	10/4/2024					
Bi Weekly/ Monthly Period Covered:	October Weekly Inspection #1					
Inspector's Name(s):	Anna Haznar					
Inspectors' Contact Information:	ahaznar@beta-inc.com					
			Weather Information			
	Inspection #1	Inspection #2	Inspection #3	Inspection #4	Inspection #5	Inspection #6
WeatherUnderground	Inspector: Anna Haznar 10/4/2024	Inspector:	Inspector:	Inspector:	Inspector:	Inspector:
Type of Inspection (i.e. non-storm event, pre- storm event, during-storm event or post- storm event):	Non-storm					
Number of days since last rain event greater than .25"						
Has there been a storm event since the last inspection?	No					
If yes, please provide storm start date, storm duration, and approx amount of						
Storm 1:						
Storm 2:						
Storm 3:						
Storm 4:						
Weather at the time of inspection (i.e. clear, overcast, cloudy, rain, sleet, fog, snow,	Clear					
Temperature:	63					
Unusual Conditions (drought, severe storm):						
Have any discharges occurred since the last inspection report?	No					
If yes, please describe:						
Note: Inspections should only be conducted or	n days during work hours while RE or	ARE is onsite. The EM should conta	act the RE to address any immediate	corrective actions.		

10/4/2024 - At the time of the Site visit, no work was occurring.

IV. Status of Existing BMPs Control Measure (These are examples; list Cleaning or Repair Needed (yes Comments/Recommendations from the EM measures specific to the project) no n/a) Perimeter erosion and sedimentation control measures were installed at the commencement of the Project and are in varying conditions across the Site; however, they were generally observed to be degraded. While areas upgradient of degraded controls are temporarily stabilized at some locations, several discharges of sediment beyond the limits of work were observed including at Stations 172+00 to 173+00, with the cattle crossing at Station 190+50, within the streambed at Station 215+00 to 216+00 and multiple other locations along the path. It is recommended that the contractor repair erosion and sedimentation control measures where breaches are occurring and where Perimeter Controls Yes stabilization has not been achieved. Areas where stabilization has commenced should be monitored for germination, as replacement of erosion controls may not be required if stabilization is achieved. Perimeter controls were generally in degraded condition along culverts, streams, and cattle crossings. New perimeter controls were added on 6/27/2024 at Stations 310+00 through 311+00 as requested. New erosion controls have been installed between the path and the crushed stone shoulders at Station 216+00 to 217+50. Inlet Protection Measures No Stabilized Construction Entrances No Stockpile Protections No Dust Control No Street Sweeping Yes Crushed stone was observed on the path throughout the Project in varying volumes. Dewatering Controls No Construction Equipment and Material Storage No Construction and Domestic Waste Storage No and Collection Location of Sanitary Waste Facilities No Washout Areas No Fertilizers, Herbicides, and Landscape N/A Varying degrees of stabilization are present within areas that were constructed/graded as part of the Project. Stabilization efforts are required at Station 105+00 to 106+00, Stations 172+00 to 175+00, Station 217+45, and Station 265+50 to 273+00. Stabilization has commenced via application of hydroseed at the majority of these locations and Stabilization of Exposed Soil Yes should be monitored for successful establishment. Multiple areas throughout the path have been observed as no longer stabilized due to herbicide application, seed should be spread in these locations to stabilize the areas. As noted in Action Items 41 and 42, it appears that work has been conducted beyond the limits of work approved under the Order of Conditions. These areas will require Overall Adherence to Environmental Permits Yes coordination amongst the Project Team to confirm if any restoration is required.

III. General Description of Construction Status

Note: Use station numbers, wetland ID or other means to determine locations of BMP's that need repairs.

V. Compliance Table - Compliance Action Items

V. 1. Compliance Action Items Observed During the One Month Reporting Period Ending [October 31, 2024].

Current Open and Closed Compliance Action Items Observed During the Reporting Period Ending [June 30, 2024]. For those items within the most current two week period, color the Item in blue, as shown on lines 48-50 as an example. RED text indicates that the item is outstanding. Once item is resolved, place resolution date in 'Recommended Resolution/Resolution Date' column, convert to BLACK text, and move to the bottom of the Action Item list. Place resolution date on TOP of resolution action. Each Compliance Action Item is assigned a unique number only to be used to reference that item for the duration of the project. Separate but related Action Items will be labeled in an "Item Number-1 and Item Number-2" manner or similar. Completed action items can be removed once they have appeared in the Bi-Weekly Report to MassDEP

"<u>Urgent</u>" - Needs to be completed immediately, "<u>High</u>" - Needs to be completed in < 7 days due to site conditions, proximity to resource areas, anticipated weather, etc., "<u>Medium</u>" - Needs to be completed within 7 days and has short-term potential to impact resource areas, "<u>Low</u>" - Needs to be completed within 7 days with minimal potential to impact resource areas

Item	Location/ Description	Observation Date	Resolution Due Date	Recommended Resolution / Resolution Date	Comments/Updates
60	Multiple piles of wood shavings were observed along the trail shoulders. In some locations, wood shavings are located directly adjacent to Resource Areas. Priority: High	10/4/2024	10/18/2024	Remove wood shavings from the shoulders.	
53	Stone was observed requiring removal from the swale on the east side of the trail at Station 172+00 to 173+00 Priority: High	7/29/2024	8/6/2024	Remove stone from the swale.	 8/5/2024 - Observation remains. 8/7/2024 - Observation remains. 8/12/2024 - Observation remains. Material was observed to have migrated within the swale to Station 173+50. 8/16/2024 - Observation remains. Crushed stone has migrated further down the swale to Station 171+50. 8/20/2024 - Observation remains. Stone is still present within the swale. 9/3/2024 - Observation remains. Stone is still present within the swale. 9/10/2024 - Observation remains. The contractor indicated that the stone within the swale would be hand removed. 9/12/2024 - Observation remains. It appears as though some stone has migrated further south down the swale. 10/4/2024 - Observation remains. Stone is still present within the swale.

43	Overtopped compost filter tubes and exposed soils beyond the limits of work at Station 105+00 Priority: High	6/7/2024	6/14/2024	Stabilize the area with the approved seed mixture and provide interim stabilization such as straw mulch.	6/14/2024 - Observation remains. 6/17/2024 - Observation remains. 6/24/2024 - Observation remains. 6/24/2024 - Observation remains. 7/8/2024 - Observation remains. 7/15/2024 - Observation remains. 7/29/2024 - Observation remains. 8/7/2024 - Observation remains. 8/12/2024 - Observation remains. 8/12/2024 - Observation remains. 8/12/2024 - Observation remains. 8/2024 - Observation remains. 8/2024 - Observation remains. 8/2024 - Observation remains. 8/202024 - Observation remains. 8/20/2024 - Observation remains. 9/16/2024 - Observation remains. 9/27/2024 - Observation remains. 9/3/2024 - Observation remains. 9/23/2024 - Observation remains.
44	Slopes require stabilization / additional seed due to lack of compost filter tubes at 105+00 and 106+00 Priority: High	6/7/2024	6/14/2024	Stabilize the slope with the approved seed mixture and provide interim stabilization such as straw mulch.	6/14/2024 - Observation remains. 6/17/2024 - Observation remains. 6/24/2024 - Observation remains. 6/24/2024 - Observation remains. 7/8/2024 - Observation remains. 7/15/2024 - Observation remains. 7/29/2024 - Regrowth of vegetation has been observed in this area. This item will remain open until the area is fully stabilized. 8/5/2024 - Observation remains. 8/16/2024 - Observation remains. 8/12/2024 - Application remains. 8/12/2024 - Observation remains. 8/20/2024 - Application fem approved seed mixture is required at this location. 8/27/2024 - Vegetation has partially stabilized this area; however, seed should be applied. 9/3/2024 - Observation remains. 8/27/2024 - Observation remains. 8/27/2024 - Observation remains. 8/27/2024 - Observation remains. 9/10/2024 - Observation remains. 9/10/2024 - Observation remains. 9/10/2024 - Observation remains. 9/23/2024 - Observation remains. 9/23/2024 - Observation remains.

47	Slope stabilization required due to condition of compost filter tubes at Station 265+50 and 273+00 Priority: High	6/7/2024	6/14/2024	Stabilize the slope with the approved seed mixture and provide interim stabilization such as straw mulch.	6/14/2024 - Observation remains. 6/17/2024 - Observation remains. 6/24/2024 - Observation remains. 6/24/2024 - Observation remains. 7/8/2024 - Observation remains. 7/8/2024 - Observation remains. 7/22/2024 - Observation remains. 8/5/2024 - Observation remains. 8/5/2024 - Observation remains. 8/7/2024 - Regrowth of vegetation has been observed in this area. This item will remain open until the area is fully stabilized. 8/12/2024 - Observation remains. 8/20/2024 - Observation remains. 9/20/2024 - Observation remains. 9/3/2024 - Observation remains. 9/10/2024 - Observation remains. 9/10/2024 - Observation remains. 9/23/2024 - Observation remains. 9/23/2024 - Observation remains. 9/23/2024 - Observation remains. 9/23/2024 - Observation remains.
34	Sediment is eroding downhill from behind the cemented stone masonry wall at Station 217+45 Priority: Low	5/28/2024	6/4/2024	Apply seed and temporarily stabilize the soils along the slope with straw, jute netting, etc.	 \$/31/2024 - Observation remains. 6/7/2024 - Observation remains. 6/14/2024 - Observation remains. 6/14/2024 - Observation remains. 6/24/2024 - Observation remains. 6/27/2024 - Representation remains. 6/27/2024 - Observation remains. 6/27/2024 - Observation remains. Grass was observed to be germinating at this location. Comment will remain open until stabilization is complete. 7/8/2024 - Observation remains. 7/15/2024 - Observation remains. 7/22/2024 - Observation remains. 7/22/2024 - Observation remains. 7/22/2024 - Observation remains. 8/5/2024 - Observation remains. 8/5/2024 - Observation remains. 8/5/2024 - Observation remains. 8/7/2024 - Observation remains. 8/12/2024 - Observation remains. 8/2/2024 - Observation remains. 9/2/2024 - Observation remains. 9/2/2024 - Vegetation that is present in this location generally consists of lady's thumb smartweed (<i>Persicaria maculosa</i>), a non-native species. Removal of non-native species and application of the approved seed mixture is required at this location. 9/10/2024 - Observation remains. See update from 9/3/2024. 9/23/2024 - Observation remains. See update from 9/3/2024. 9/23/2024 - Observation remains. See update from 9/3/2024. 9/23/2024 - Observation remains. 9/24/2024 - Observation remains. See update from

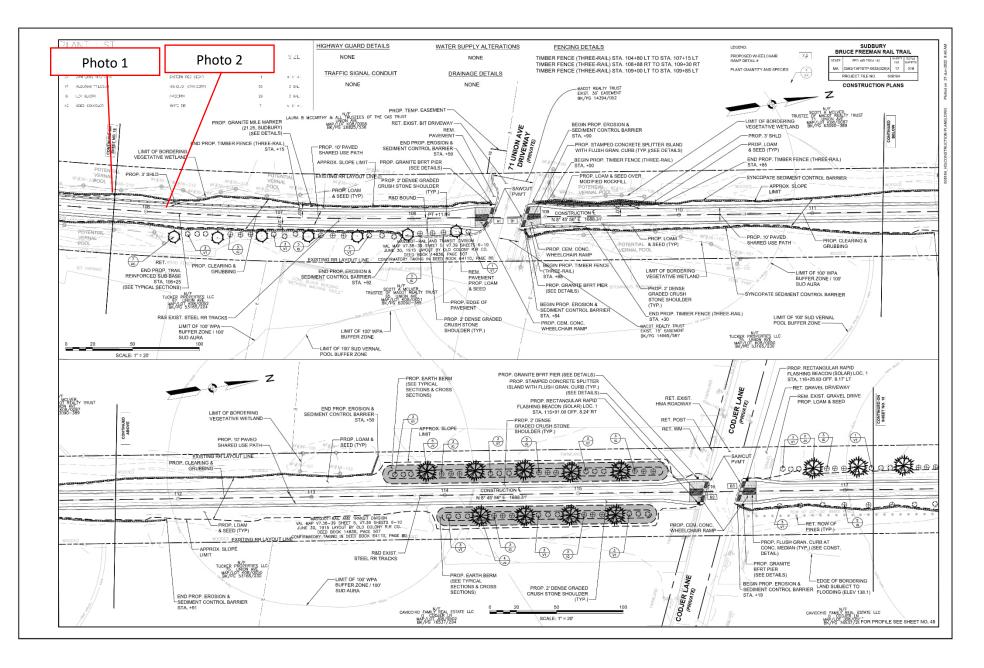
	1				
32	Soil and organic debris has been placed within the wetland between wetland flagging WF#23-119 and WF#23-118 at Station 224+00 Priority: High	5/21/2024	5/28/2024	Remove all material and provide stabilization of the area with the approved wetland seed mixture. Straw should also be placed for interim stabilization.	 5/28/2024 - Observation remains. 5/31/2024 - Observation remains. 6/17/2024 - Observation remains. 6/17/2024 - This area has been hydroseeded multiple times, but the debris should also be removed from the downgradient wetland. 6/24/2024 - Observation remains. The area was hydroseeded again. 7/8/2024 - Observation remains. The area was hydroseeded again. 7/8/2024 - Observation remains. The area was hydroseeded again. 7/15/2024 - See previous update. 7/29/2024 - Observation remains. 7/29/2024 - Observation remains. 8/5/2024 - Observation remains. 8/7/2024 - Observation remains. 8/12/2024 - Observation remains. 8/202024 - Observation remains. 8/202024 - Observation remains. 8/20/2024 - Observation remains. 8/20/2024 - Observation remains. 8/20/2024 - Observation remains. 9/3/2024 - Observation remains
6	Exposed sediment slope at Station 172+00 to 175+00 Priority: High	5/8/2024	5/15/2024	Install temporary sediment controls along the slope such as jute netting and/or straw following the application of seed.	 5/16/2024 - Observation remains. 5/21/2024 - Partial germination was observed. 5/21/2024 - Partial germination was observed. 5/21/2024 - Further earthwork has occurred and soils require stabilization. 6/1/2024 - Observation remains. 6/1/2024 - Observation remains. 6/2/2024 - Observation remains. 6/2/2024 - Observation remains. 6/2/2024 - The area has been regraded and loam has been spread. New trees have been planted upgradient of the swale. Stabilization is still required. 7/8/2024 - Ubservation remains. 6/2/2024 - See previous update. 7/2/2024 - Observation remains. 7/2/2024 - Observation remains. 8/5/2024 - Observation remains. 8/12/2024 - Observation remains. 8/20/2024 - Observation remains. 9/3/2024 - Vegetation that is present in this location generally consists of lady's thumb smartweed, a non-native species. Removal of non-native species and application of the approved seed mixture is required at this location. 9/3/2024 - Observation remains. See 9/3/2024 update. 9/3/2024 - Observation remains. The contractor reached out hydroseed has been applied to this area. 10/4/2024 - Hydroseed has been applied to this area, the hydroseed has been applied to this area. 10/4/2024 - Hydroseed has been applied to this

52	Slopes along the driveway to the parking lot at Station 216+50 requires stabilization Priority: Medium	7/29/2024	Resolved: 10/4/2024 8/6/2024	Install erosion control blanket and place seed.	 8/5/2024 - Observation remains. 8/7/2024 - Observation remains. 8/12/2024 - Observation remains. 8/16/2024 - Observation remains. 8/20/2024 - Observation remains. Erosion controls have been installed between the slope and the downgradient stream, but seed is still required. 8/27/2024 - Observation remains. 9/3/2024 - Observation remains. 9/10/2024 - Observation remains. 9/12/2024 - Observation remains. 9/12/2024 - Observation remains. Some germination has been observed at this location. 9/23/2024 - Observation remains. See previous update. 10/4/2024 - The slopes have become sufficiently stabilized with vegetation.
		Typically, th	ese items require coordination wit	h MassDEP. If so, remove once app	roval is obtained from MassDEP
ltem	Location/ Description	Observation Date	Resolution Due Date	Recommended/Discussed Resolution	Comments/Updates
59	Multiple locations of exposed soils along the Project corridor require stabilization Priority: High	9/3/2024	9/10/2024	The contactor should apply the approved seed mixture to areas of exposed soils and place straw.	9/3/2024 - Herbicide application caused multiple areas along the path to be no longer stabilized. If thatch is present in these locations the thatch should be removed before seeding occurs. A location near Station 320+50 has been cleared outside of the limit of work and requires stabilization. Other areas along the path where seed did not germinate should be reseeded with the approved seed mix and straw should be placed on the areas of exposed soil. 9/10/2024 - Observation remains, see previous update. A few locations along the trail have been hydroseeded but a majority of the locations of exposed soil require seed and stabilization. 9/16/2024 - Observation remains. The contractor indicated areas of bare soil will be hydroseeded. 9/23/2024 - Observation remains. The contractor indicated areas of bare soil will be hydroseeded. 9/23/2024 - Observation remains. The contractor reached out and indicated all areas of exposed soils south of Hudson Road were hydroseeded at the inspection occurred. 10/4/2024 - Observation remains. The contractor reached out and indicated all areas of exposed soils south of Hudson Road were not seeded using hydroseed, hydroseed was applied in a few locations, but there are still large areas of exposed soil both south and north of Hudson Road that require seeding. Thatch was not removed in any areas before hydroseed was applied. The contractor should provide the tag from the seed mix thas sugficiently stabilized the item will be closed.

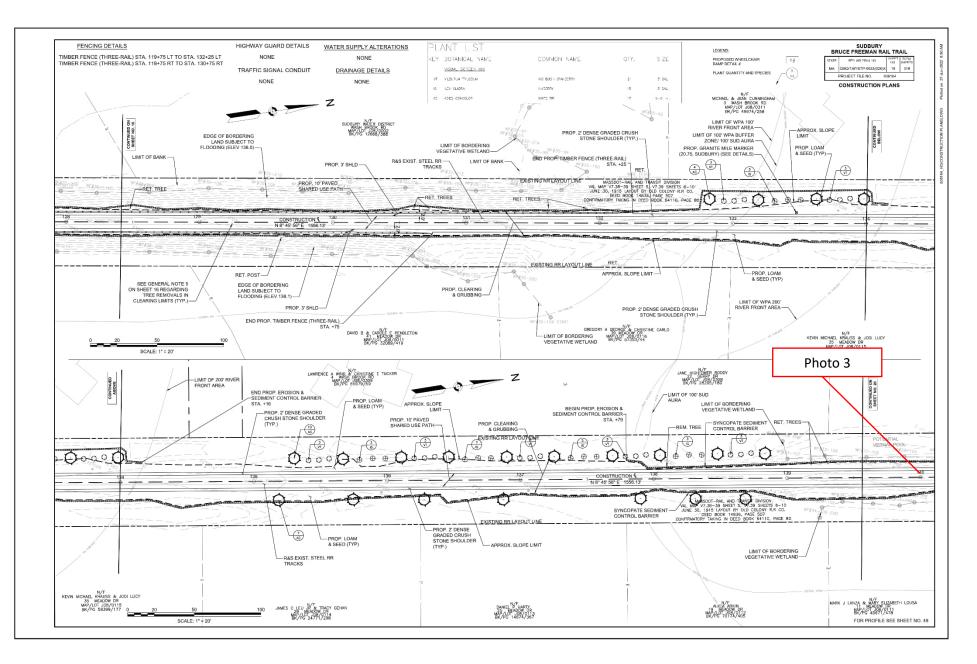
5	Crushed stone used for the dense graded crush stone shoulders has been observed as migrating both onto the path, off the sides of the path, and into the adjacent Resource Areas throughout the Project Priority: High	8/7/2024	8/14/2024	Remove all crushed stone from Resource Areas and develop a plan to cease discharges of stone.	 8/12/2024 - Crushed stone is still present in varying amounts throughout the path and on the sides of the path. 8/16/2024 - Observation remains. 8/20/2024 - Crushed stone has been removed from some adjacent resource areas but is still observed as migrating onto and off of the path in multiple locations throughout the Project. 8/27/2024 - Crushed stone has been observed as migrating from the shoulders throughout the path. 9/3/2024 - Crushed stone was observed to as migrating from the shoulders throughout the path. 9/3/2024 - Crushed stone was observed to have discharged to the cattle crossing at Station 190+50 and within the streambed at Station 215+00 to 216+00. Crushed stone was observed to have been placed on the root system of a fallen tree at Station 310+00 near Bank flag #BF4-108. 9/10/2024 - Observation remains. Crushed stone continues to migrate on to and off of the path. 9/16/2024 - Observation remains. The contractor indicated the locations where crushed stone has migrated off the path will be hand removed and crushed stone at hough crushed stone that has migrated onto or off of the path has been removed in any location along the Project. More crushed stone has migrated onto the path throughout significant portions of the path. 9/27/2024 - Observation remains. Crushed stone is still located on the side of the path and on the path in varying amounts. 10/4/2024 - Observation remains. Crushed stone is still located on the side of the path and on the path in varying amounts.
	Riprap slope extends beyond limits of work along the WF1 Series wetland near flags 103 to 107 Priority: High	5/28/2024	6/4/2024	The Contractor should confirm if this work was permitted by the Conservation Commission, as it does not appear to be a part of the approved plans/impacts. MassDOT should be consulted on next steps regarding notification and potential restoration.	the sides of the trail in several locations. 5/31/2024 - Observation remains. 6/17/2024 - Observation remains. 6/17/2024 - During this inspection, additional work in support of the repair/potential replacement of an underlying pipe has was ongoing. It is recommended that the contractor confirm that they have coordinated with the Conservation Commission for this work and provide a restoration plan for the area once work is complete. 6/24/2024 - During this inspection, BETA was informed that the existing cast iron pipe was replaced with a new concrete 12-inch reinforced concrete pipe. It appears that riprap was replaced along the side slopes to mirror conditions observed prior to this inspection. 6/27/2024 - During this inspection, the area was observed to have been rolled and prepared for paving. Hydroseed was applied and plantings were installed. 7/8/2024 - Germination was observed and the area will be monitored for stabilization. See previous updates regarding Conservation Commission coordination. 7/15/2024 - This area could not be assessed due to paving operations ongoing during the inspection. 7/22/2024 - Observation remains. 8/5/2024 - Observation remains. 8/5/2024 - Observation remains. 8/2/2024 - Observation remains. 9/3/2024 - Observation remains. 9/3/2024 - Observation remains. 9/3/2024 - Observation remains. 9/2/2024 - Observation rem

41	Stream Bank has been regraded beyond the limit of work at Station 216+00 Priority: High	5/28/2024	6/4/2024	The Contractor should confirm if this work was permitted by the Conservation Commission, as it does not appear to be a part of the approved plans/impacts. MassDOT should be consulted on next steps regarding notification and potential restoration.	 5/31/2024 - Observation remains. 6/7/2024 - Observation remains. 6/14/2024 - Observation remains. 6/14/2024 - Observation remains. 6/24/2024 - Observation remains. 6/24/2024 - Observation remains. 7/27/2024 - Observation remains. 7/15/2024 - Observation remains. 7/15/2024 - Observation remains. 7/15/2024 - Observation remains. 7/22/2024 - Observation remains. 7/22/2024 - Cushed stone and sediment continue to be discharged to the stream between Stations 215+00 and 217+00 due to overtopped and undermined compost filter tubes. 7/29/2024 - Observation remains. 8/7/2024 - Observation remains. 8/7/2024 - Observation remains. 8/12/2024 - Observation remains. 8/12/2024 - Observation remains. 8/2024 - Observation remains. 9/2024 - Observation remains. 9/2024 - Observation remains. 9/2024 - Observation remains. 9/3/2024 - Observation remains. 9/23/2024 - Ob	
			VI. Agency Submittals	(Note: only filled out for monthly	report)	
	Submittal	Date Submitted	Description	Status		
		1	VII. Attachments (#3 only attached with monthly rep	ort)	
1. Fiel	d Sketch		Thi Attachments (
	. Photographic Documentation					
	/eek Look ahead schedule					

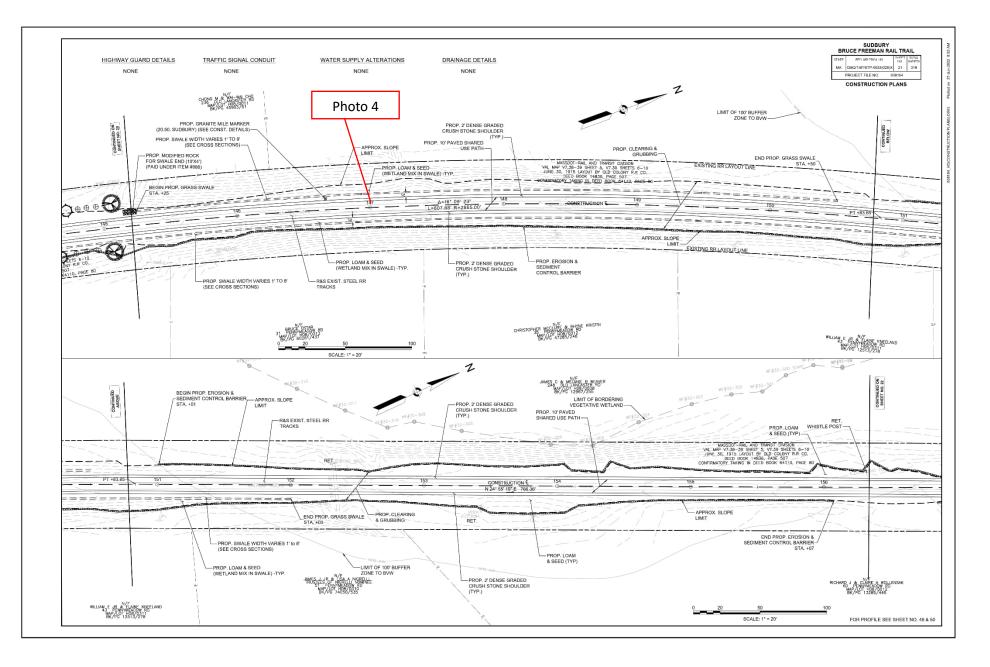




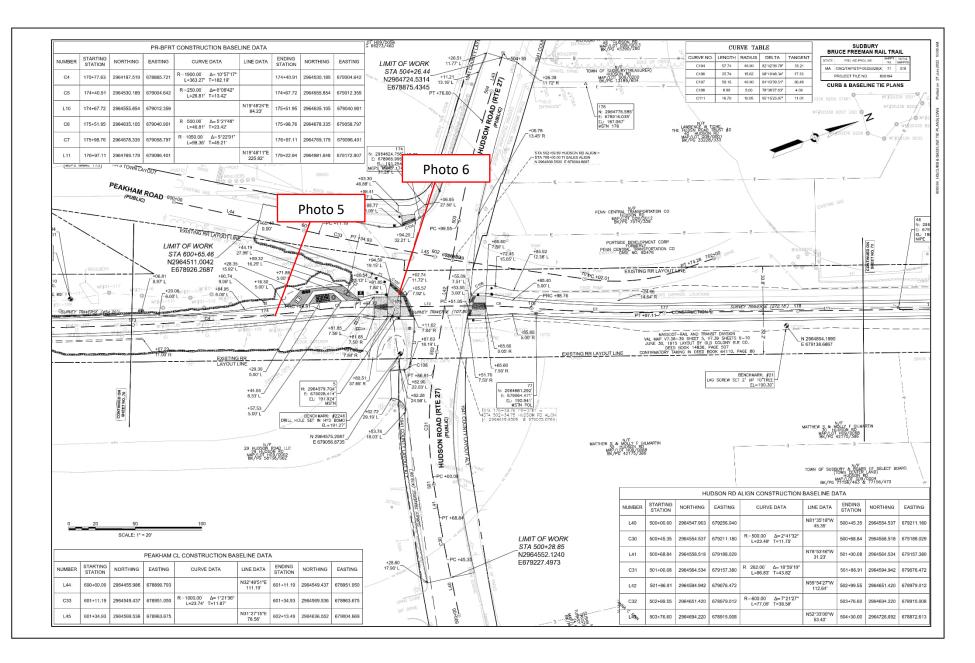




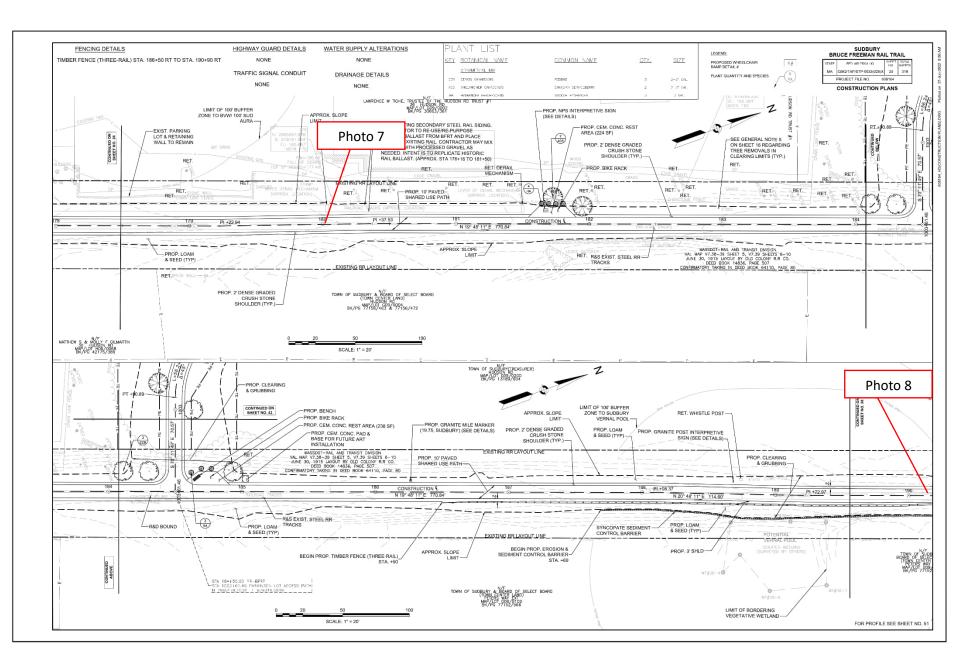




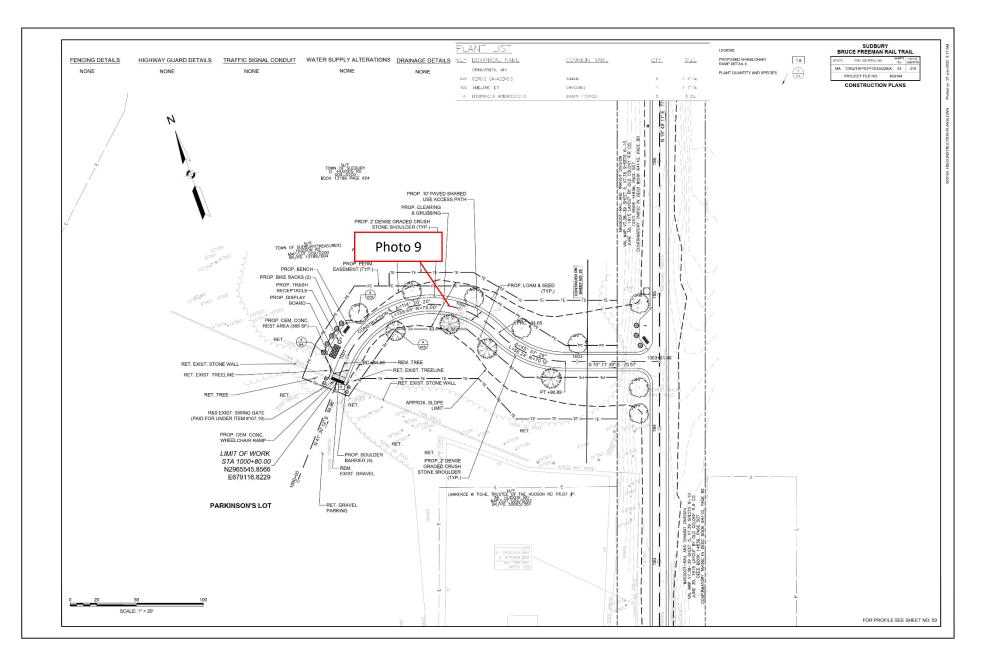




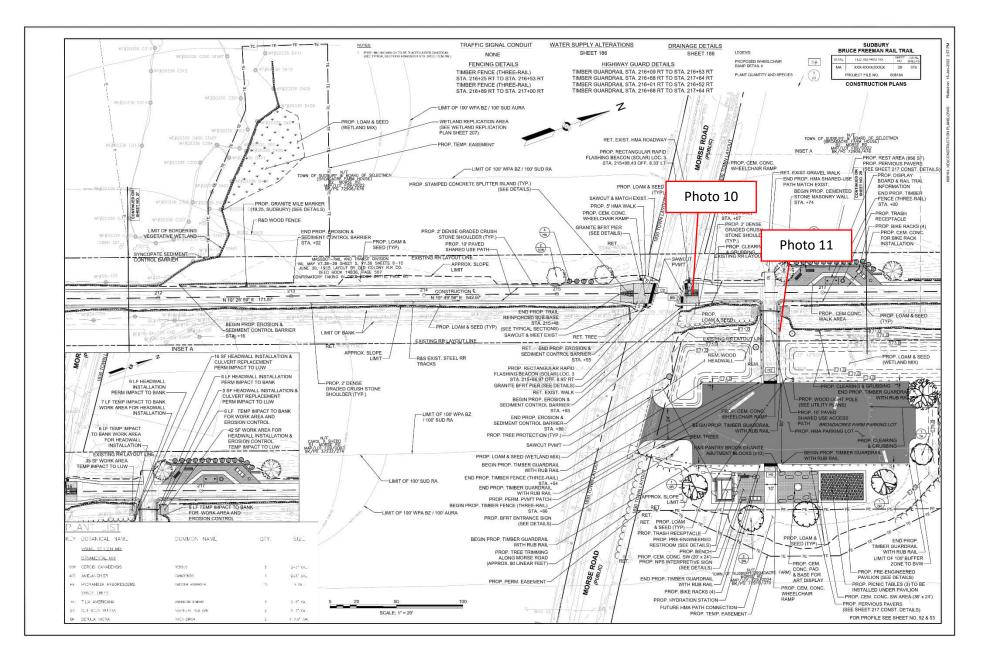
BETA IMPROVING COMMUNITIES TOGETHER



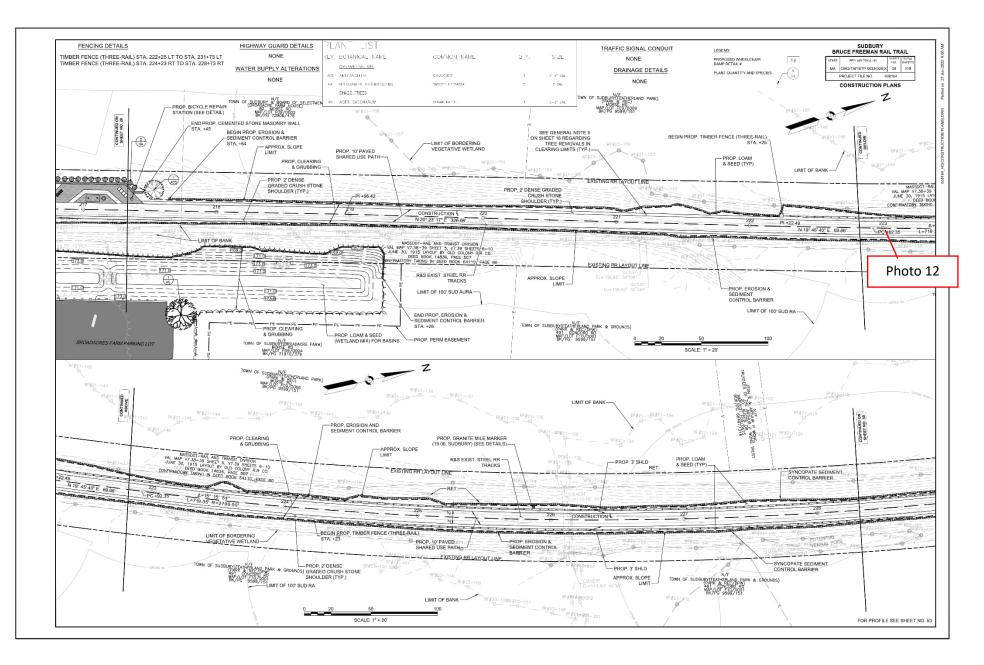




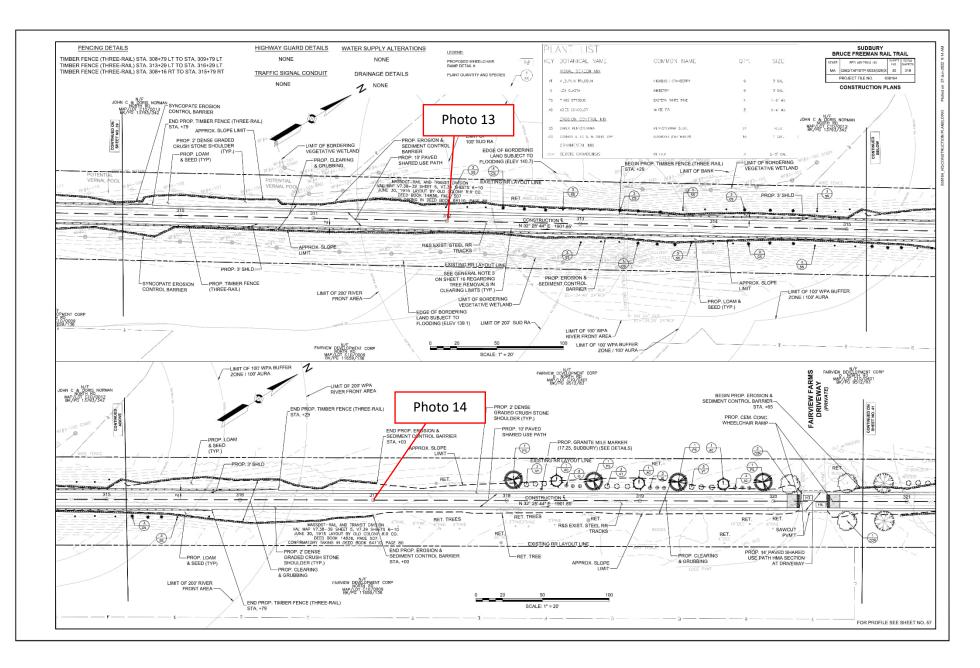




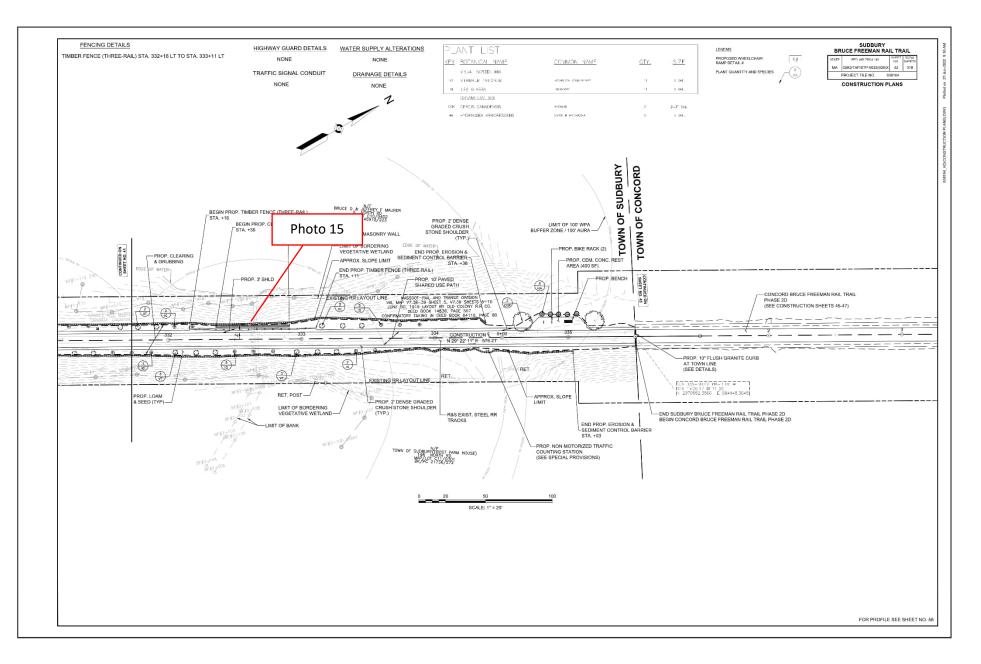




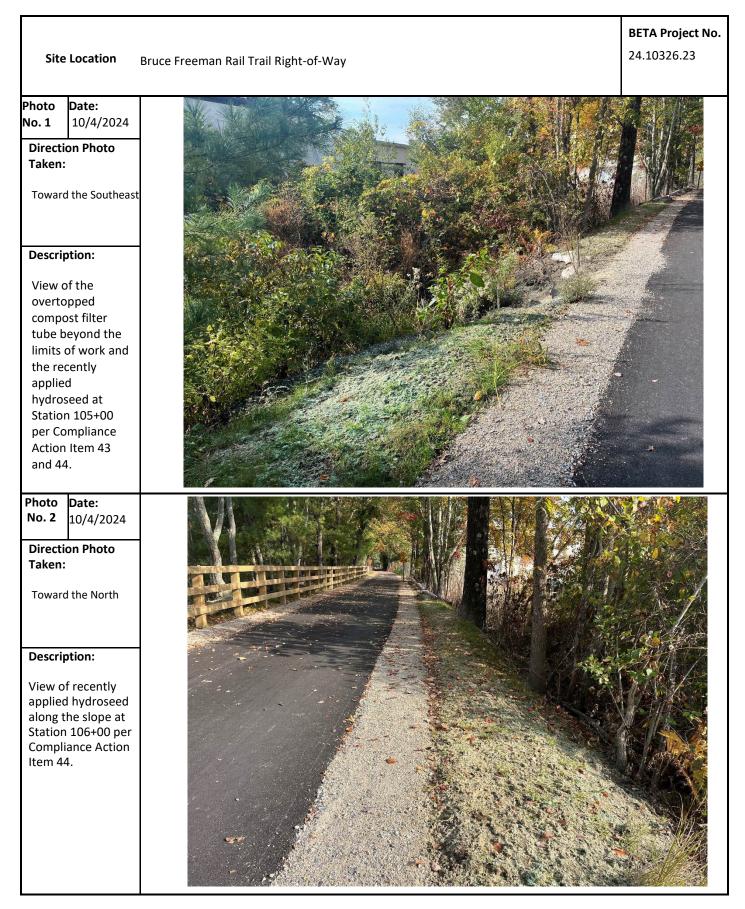
BETA IMPROVING COMMUNITIES TOGETHER







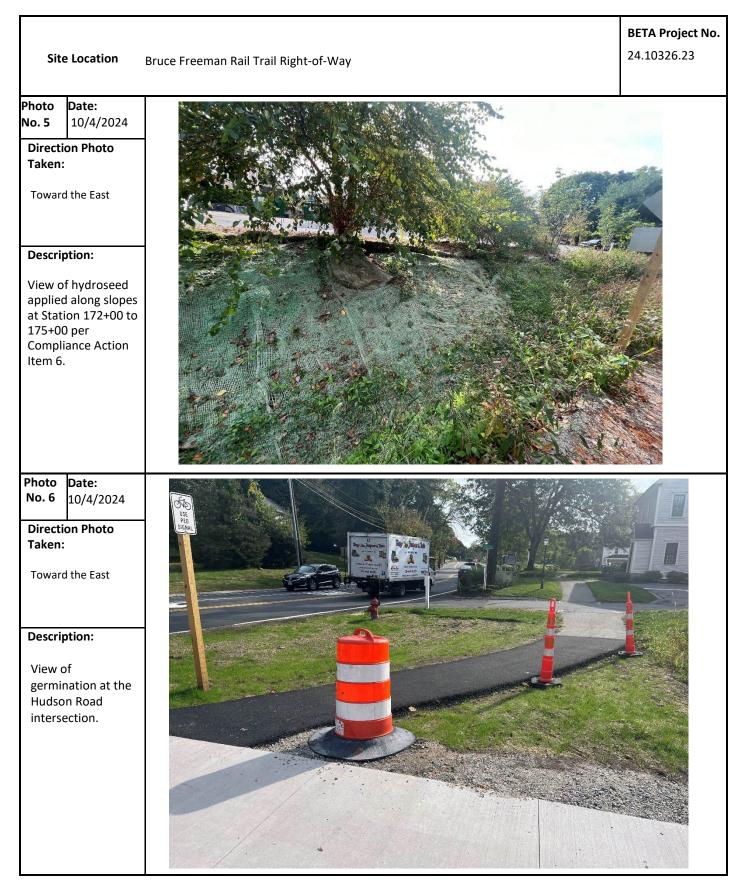




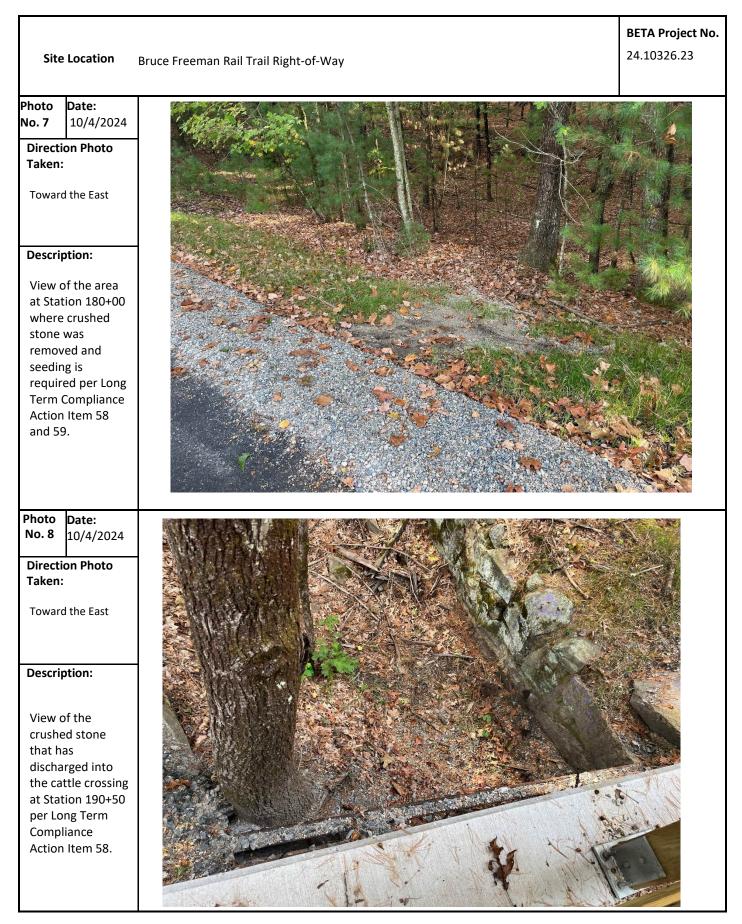


Site	e Location	Bruce Freeman Rail Trail Right-of-Way	BETA Project No. 24.10326.23
Photo No. 3	Date: 10/4/2024		9 6 3
			and the second
Direct Taken	ion Photo :		
Towar	d the North		
Descri	ption:		
that is stabili herbid applic Statio per Lo Comp	of an area s no longer ized due to cide nation at n 140+00 ong Term liance n Item 59.		
Taken	Date: 10/4/2024 ion Photo : d the North		
area w hydro applie thatch 147+C Comp Action This c was o multig	al view of an where seed was ed over n at Station		

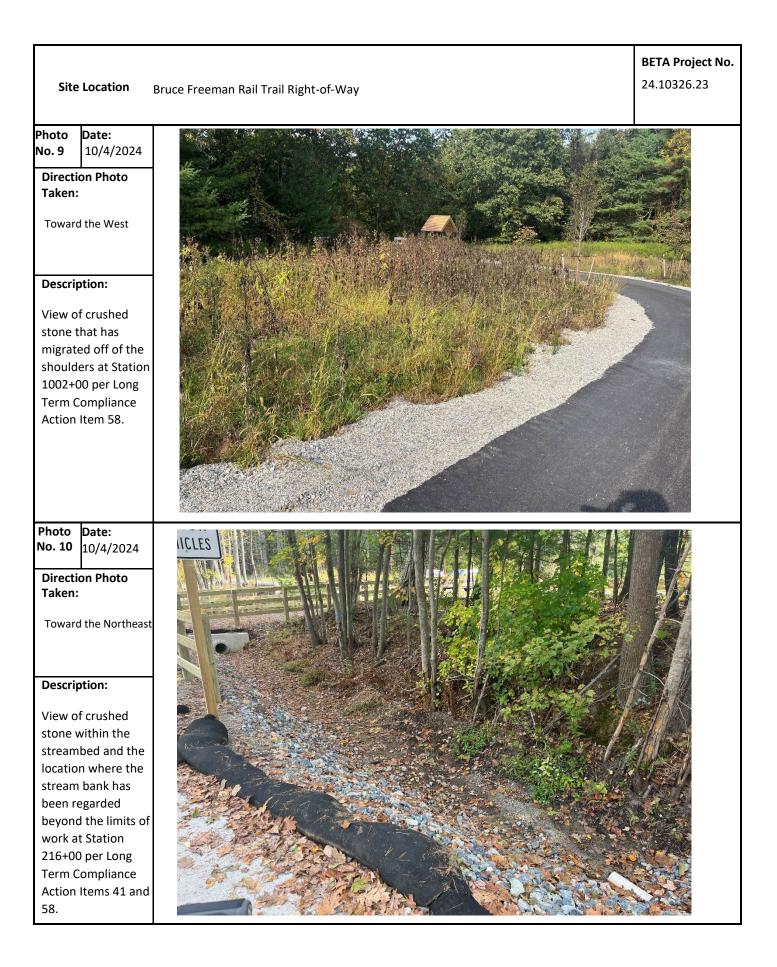




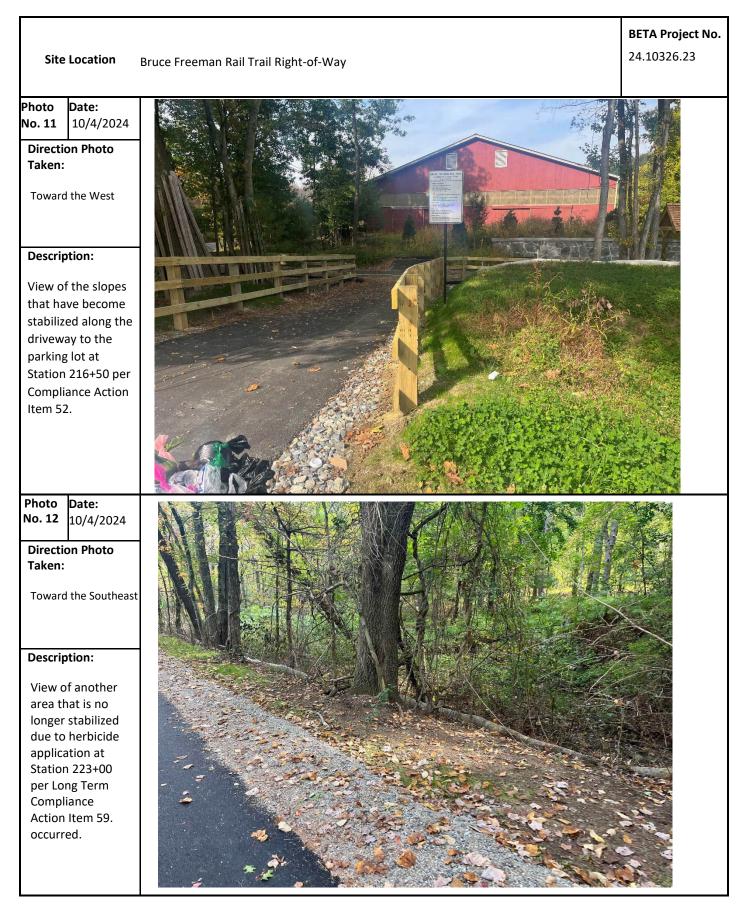














Site	e Location	Bruce Freeman Rail Trail Right-of-Way	BETA Project No. 24.10326.23
Photo No. 13	Date: 10/4/2024		
Taken:	i on Photo : d the North		
where stone h on to t Station Long Te	f a location crushed has migrated he path at n 312+00 per erm iance Action		
No. 14 Directi Taken:	d the South	Povis Field Paking Lot Broad Acros farm Parking Lot 18m 1 Subury Center Historic District 28m 1 Cot Mass Central Rait Trail 34m 1	
pile of shaving require Station Compli Item 60 conditi observ	gs that es removal at n 317+00 per iance Action		



Т

٦

Site Location	Bruce Freeman Rail Trail Right-of-Way	BETA Project No. 24.10326.23
Photo Date: No. 15 10/4/2024		
Direction Photo Taken: Toward the North		
Description: View of the riprap slope that extends beyond the limit of work along the WF1 Series wetland at Station 332+00 per Long Term Compliance Action Item 42.		