
**New Bedford Regional Airport
Runway Safety Improvements Project – Phase 4
Reconstruct, Mark, and Groove Runway 5-23
MassDEP File No. SE049-0635**

ENVIRONMENTAL MONITOR INSPECTION FORM

Environmental Monitor: **Amanda Atwell**

Date/ Time of Inspections: **7/29/14 (morning), 7/31/14 (afternoon), 8/7/14 (morning).**

Weather Conditions: **7/29/14 70s sunny, 7/31/14 80s, sunny, 9/7/14 70s, sunny- (weatherunderground.com).**

Observed Construction Activities Underway (attach additional pages if necessary):

On 7/29/14 Epsilon met Tena Davies, MassDEP and Sarah Porter, New Bedford Conservation Commission to conduct a compliance inspection. Open items noted in the previous EM report (Report 7) were generally addressed the Friday and Monday prior to the site visit. The attendees were pleased with the state of erosion controls, including wood chip addition to stabilize the ILS road, further arming, patching silt fence downgradient stormwater headwalls, and that the contractor was mobilizing to spread loam and hydroseed. Items noted during the site visit included (1) stabilizing the side slopes adjacent to the catch basin 1 headwall, (2) staking in and protecting the catch basin 10 and 3, and (3) restaking haybales along the west ditch at the blow out location and (4) clearing minor sediment accumulation along the west ditch at the blow out location. The WS sent an interim report by the end of the day indicating that catch basin 3 was protected.

On 7/31/14 the contractor was continuing with its grading, site prep, stormwater installation work, and electrical trenching on the Runway 23 end. The contractor is spreading loam and conducting electrical work on the Runway 5 end. The contractor responded to additional erosion control fixes and site clean-up. Tree clearing work was ongoing within the Dartmouth area, it is estimated that 22 acres have been cleared to date. The tree clearing contractor is adhering to the modified operations described in Report 7.

On 8/7/14 the contractor was continuing with its grading, site prep, paving, stormwater installation work, and electrical trenching on the Runway 23 end. The contractor is spreading loam and hydroseed, and conducting electrical work on the Runway 5 end and Taxiway "A". The contractor has trenched, armed and sealed catch basin 3 and 11. The contractor has started work in "Area 5", north of New Plainville Road and RSA 23. Current work includes site preparation for the MALSR lighting, including the wetlands fill within this area. The contractor has projected to start the wetland replication phase work on 8/18/14; however the WS will be in contract with the requisite agencies once a true construction schedule and sequence is outlined. Tree clearing work was ongoing within the Dartmouth area, it is estimated that 30 acres have been cleared to date. The tree clearing contractor is adhering to the modified operations described in Report 7. The ILS road is in generally good condition, the majority of the road and sideslopes are well armed with wood chips. A few discrete areas wood chips have migrated to the sideslope or further up the road from dragging "twitch" (tree branch loads). In these areas, the ILS road is still well armed along its sideslope and no evidence of mobilization into the wetland was observed. The stockpile remained in good condition and outside the 100 foot buffer zone.

Status of Existing BMPs and Other Inspection Items

Control Measure	Cleaning or Repair Needed	Comments/Recommendations from the EM
Erosion Control Devices	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> n/a	<p>Erosion controls were generally in good condition throughout the work zone. The contractor repaired and restaked silt fence and hay bales in discrete areas. No sediment was found downgradient of the silt fence and the fence was repaired by the time of inspection. A discrete area of silt fence along the 5 end RSA was fixed, hay bales were restaked and sediment was scooped out of the down gradient abandoned silt fence to ensure that sediment wouldn't mobilize from this area. The upgradient silt fence is properly staked and in good condition. Erosion controls including check dams, silt fence and hay bales are in good condition. The Catch Basin 3 and 11 were appropriately covered and armed.</p> <p>Sediment controls along the ILS road will be replaced prior to electrical trenching and earthwork.</p> <p>Areas where previous failures were observed are continuing to be monitored and no additional issues have been observed. The contractor has an emergency supply of silt fence, hay bales and compost tubes present on the site.</p>
Box Turtle Barriers, Gates and Protection Measures	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> n/a	Turtle barriers were in good condition at time of inspections. The moveable gate installed at the West Ditch arch culvert was functioning properly at the time of inspections. Turtle gates inspected and had been fixed in areas where sediment needed to be added.
Stabilized Construction Entrances, Haul Roads, Dust Control	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> n/a	The stone tracking pad was in good shape with no significant silt or sediment on the roadway. An individual from ET&L was stationed at both entrances for site access control and sediment control. The gravel access road was previously stabilized with pavement millings to minimize erosion in the buffer zone and adjacent wetlands and dust generated by the heavy construction equipment – this BMP has worked well. Epsilon observed watering of exposed surfaces throughout the work zone and sweeping the construction entrance and Shawmut Ave. by ET&L to minimize dust.
Stockpiling Materials	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> n/a	Contractor staging area remains in good condition. Sediment stockpile and tree clearing staging area remain in good condition outside of the 100 foot buffer zone. Soil from the large stockpile located in the RSA has been utilized onsite.
Dewatering	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> n/a	Some locally low areas were being dewatered to upland areas during the last week of July. Dewatering was not actively observed by Epsilon, but no adverse impact was noted. The ends of the dewatering hoses were staged in upland areas outside of resource areas.
Construction Equipment Storage and Refueling	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> n/a	Equipment storage is located within the designated lay down area. Supplies and equipment staging for the tree clearing work is located in the Runway 5 RSA. No issues were observed.
Site Clean-up and Stabilization	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> n/a	Areas noted during the last EM report have been hand cleared and stabilized. Epsilon is continuing to monitor wetland

Control Measure	Cleaning or Repair Needed	Comments/Recommendations from the EM
		resources downgradient from the erosion controls at each headwall, including the west ditch. It does not appear that sediment will need to be removed from these areas. However, these areas will be monitored, and cleaned and stabilized if necessary.
Timber Swamp Matting in Wetlands for Tree Clearing in Dartmouth	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> n/a	Timber mats and the overall timber mat road are in generally good condition. The contractor is supplementing the road with cut logs in a few areas. The contractor is actively mending the road whenever necessary to avoid issues. On 8/7/14 the contractor was resetting the mat road to inspect individual timber mats upgrade the mat road. The contractor is still driving extremely slow and keeping an eye on the water to make sure that water movement is not appreciable. The contractor has also placed moderate sized tree branches and trunks perpendicularly from the timber mats to make sure that water does not move far and sediment is not re-deposited.
Work Area 1A – Tree Clearing in Dartmouth	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> n/a	<p>Wagner Wood is still adhering to their modified operations, including staging more, cutting trees within the clearing area with a chainsaw, dragging smaller twitch loads and driving down the center of the ILS road. Logs are still being used to arm these silt fence and hay bale controls and are still in good condition.</p> <p>The ILS road is in generally good condition, the majority of the road and sideslopes are well armed with wood chips. A few discrete areas wood chips have migrated to the sideslope or further up the road from dragging “twitch” (tree branch loads). In these areas, the ILS road is still well armed along its sideslope and no evidence of mobilization into the wetland was observed. More timber mats were added to protect the West Ditch culvert and the timber mat road over the Paskamansett has been rearmed.</p> <p>Tree clearing itself has been progressing smoothly. There is one feller buncher and three grappler machines to remove trees. Three pieces of equipment are moving trees to the processing area and fixing the timber mats as needed. The feller buncher on its own series of mats was clearing trees while one grappler was moving trees to the timber mat access road. One snag per acre has been identified and shored off at approximately 10-12 ft. One trailer of logs is removed from the site daily. Tree processing is ongoing.</p>
Work Area V – Wetland Replication Area	<input type="checkbox"/> yes <input type="checkbox"/> no <input checked="" type="checkbox"/> n/a	This work has not yet started. Work within one of the three MALSRS light station work wetland fill areas (north of New Plainville Road) has commenced. It is likely that wetland replication area work will begin the week of 8/18.
Overall Adherence to Environmental Permits		The project site was in generally good condition during the inspection period and no obvious contradictions or intentional violations with the various permits and approvals were noted.

Other General Comments:

On 7/29/14 Epsilon reviewed the Runway 5 end, Runway 23 end, ILS road, tree clearing operations and stormwater headwalls with Tena Davies, MassDEP, Sarah Porter, New Bedford Conservation Commission, the WS and RE. The site is in generally good condition and the contractor has responded to outstanding items from the previous report. Erosion control stockpiles, including extra compost filter tubes, are on site for repairs.

On 7/31/14 – reviewed the Runway 5 end, Runway 23 end, ILS road, tree clearing operations and stormwater headwalls with the WS and IO. The site was generally in good condition and erosion controls were holding up nicely.

On 8/7/14 – reviewed the Runway 5 end, Runway 23 end, ILS road tree clearing operations, work north of New Plainville Road (RW 23) and stormwater headwalls. The site was generally in good condition and erosion controls were holding up nicely.

On Wednesday 8/6/14 Epsilon forwarded ASG's analysis of the use of pavement millings BMP to MassDEP.

Open action items from the June 12 meeting with MassDEP: (1) formal proposal to stabilize interface between Turtle Area 3 and Site 6 with mulch (continuing with "wait-and-see" approach as the area has vegetated and the sand is not currently migrating; it continues to hold up well following rain events); and (2) a follow up response to MassDEP's June 4, 2014 email regarding potential long term stabilization measures for runoff near West Ditch.

Are additional erosion control measures needed?

no yes If yes, describe: **No.**

Are sediment/pollution discharges from the site present?

no yes If yes, describe: **No new releases, the previous minimal sediment discharges noted in previous reports were inspected and not new work is currently necessary.**

Describe any corrective action required at this time: **None at this time. WS continues to work with ET&L to mitigate any potential erosion issues.**

Attach additional sheets with notes, comments, illustrations and issues as needed. Use site plan to identify locations of work areas or issues noted above: **Photos are attached.**

AA/MH



View of West Ditch immediately downstream Catch Basin 1 headwall. This was the location of the previous coffee colored water photo. Any accumulated sediment has settled and is not appreciable.



View of catch basin 1 head wall. Water is clear and still flowing through the constructed double hay bale, rock, and double silt fence. Note that hay was temporarily spread in this area. The slopes will be hydroseeded by COB 8/7/14.



View of controlled water release at this headwall and into the west ditch.



View of open catch basin 3, serving the catch basin 1 headwall. The team observed this feature during the MassDEP/ New Bedford ConComm site visit. The catch basin was properly protected by close of business that day and accumulated sediment was removed from the swale.



View of contractor fixing catch basin 3 within 20 minutes of reporting.



View of interim stormwater swale condition at the Runway 23 end, the contractor is subgrading Taxiway "A".



View of wetland downgradient from interim condition swale. Erosion controls upgradient are in good condition.



View of discrete issue with erosion controls at the area north of New Plainville Road. A truck hit controls. Contractor will restake and repair.



View of subbase within wetland fill at the Runway 23 MALSR end. Erosion controls are in good condition.



Typical view of erosion controls in Runway 23 end MALSR fill area.



Hydroseeding operation near Runway 5 end.



View of spread topsoil adjacent to Runway 5 end, adjacent headwall is dry and erosion controls are in good condition.



View of repaired and restaked erosion controls at the blow out area on Runway 5 RSA end. Restaked hay bales were painted.



Another typical view of re-staked erosion controls and gravel access road.



View of headwall from catch basin 11. Hay bales and silt fence are properly staked and retaining this cloudy water.



View of erosion controls, no water is seeping, moving through the erosion controls untreated.



View of electrical trenching operations.



View of properly armed catch basin 11. Compost tubes are properly staked.



View of wood chips along ILS road.



Another view of wood chips along the ILS road.



View of area where twitch has mobilized wood chips either downslope or further down the road. The side slopes are still very well armed and no movement within the wetland was observed.



View of logging “twitch” transported down the ILS road.



View of contractor resetting and inspecting the timber mat road.



View of processing operation while the contractor waits for clearance from the turtle sweep folks.



View of portion of tree clearing (note snags in the background).