
**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: **8/14/14 (morning), 8/19/14 (morning), 8/21/14 (morning).**

Weather Conditions: **mid 60s to high 70s partly cloudy to sunny. On 8/13/14 EWB received approximately 0.5 inches of rain. (weatherunderground.com)**

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

On 8/14/14 the contractor was continuing with its grading, paving, and electrical trenching on the Runway 23 end. The contractor is spreading loam and conducting electrical work on west side of Runway 5 end. East side taxiway and runway lights have been installed. No erosion control issues were noted as a result of the heavy rains on Wednesday. Work in “Area 5”, north of New Plainville Road and RSA 23 is ongoing and the wetland fill for MALSR work is almost complete. Tree clearing work was ongoing within the Dartmouth area, it is estimated that 33-35 acres have been cleared to date. Tree clearing is scheduled for completion early the week of 8/17/14. 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 “twich” (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.

On 8/21/14 the contractor has completed paving. Site grading and topsoil is ongoing at both ends of the Runway. Areas are being hydroseeded as soon as feasible. Electrical trenching is ongoing and is located mostly by Runway 23 end and in the RSAs of both Runways. Wetland fill within in “Area 5”, north of New Plainville Road has been seeded. The contractor has projected to start the wetland replication phase work on 8/26/14. Tree clearing has been completed within the Dartmouth area. The tree clearing contractor is pulling out swamp mats and continuing to process the trees onsite. The contractor is adhering to the modified operations described in Report 7. The 0.2 acres of hand clearing was completed along the Paskamansett River. A portion of the fiber rolls within the Dartmouth tree clearing area were installed. The ILS road was rototilled on Thursday 8/21/14. 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 checked="" type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> n/a	<p>Erosion controls were generally in good condition throughout the work zone. 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>The contractor repaired and restaked silt fence and hay bales in discrete areas. Along one of the MALSR light pole areas, on 8/14/14 the EM noted that a discrete portion of the erosion controls were compromised likely by a strike by heavy equipment. Sediment was located on the wetland side of the silt fence in this area. The WS was immediately notified. Sediment removal and silt fence repair was noted in the WS report submitted last Saturday. It was noted on 8/21/14 that the silt fence and hay bales in this area are slumped and in fair to poor condition. The EM recommended that silt fence in this area be repaired and silt fence along the entire MALSR light installation work be inspected.</p> <p>On 8/21/14 the EM noted that the contractor rototilled the ILS road, breaking up the pavement in advance of the required pavement restoration. Sediment controls had not been replaced along the ILS road. The existing sediment controls (generally compost tubes) are in poor condition due to tree clearing work. Wood chips are arming the tops and side slopes. No sediment was found downgradient of the damaged erosion controls in this area. The EM recommended that work stop along the ILS road until sediment controls are reestablished. The WS had indicated that sediment controls were slated to be reestablished by 8/22/14.</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 are in good condition.
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.

Control Measure	Cleaning or Repair Needed	Comments/Recommendations from the EM
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. Surplus sediment has begun to be stockpiled by EWB for future use within airport property off of Aviation Way. Epsilon is working with EWB to identify and establish stockpile locations that are not located within the 100 foot buffer zone to wetlands.
Dewatering	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> n/a	Some of the electrical vaults were being dewatered to upland areas during the 8/14/14 visit. The electrical contractor was using a shop vac and dewatering the vault to the adjacent upland area. No adverse impact was noted.
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 in previous EM reports appear stable. Epsilon is continuing to monitor wetland 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. 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 during the 8/14/14 site visit. The contractor completed removal of the timber mats during the 8/21/14 site visit. The operation went smoothly.
Work Area 1A – Tree Clearing in Dartmouth	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> n/a	As of 8/14/14 Wagner Wood was 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 were still being used to arm these silt fence and hay bale controls and are still in good condition. 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. As of 8/21/14 tree clearing was completed. The timber mats were removed and the slash and additional trees to protect the hay bales were removed. Tree processing is ongoing and the timber mats are getting stockpiled within the staging area.
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 MALSR light station work wetland fill areas (north of New Plainville Road) is ongoing. Epsilon continues to advise the WS and Site Contractor to carefully read and follow the detailed wetland construction notes in the permit drawings. Epsilon will provide additional oversight during construction of this area. It is likely that wetland replication area work will begin the week of 8/24.

Control Measure	Cleaning or Repair Needed	Comments/Recommendations from the EM
Overall Adherence to Environmental Permits		The project site was in generally good condition during the inspection period except for the ILS road.

Other General Comments:

On **8/14/14** – reviewed the Runway 5 end, Runway 23 end, Area 5, 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 **8/21/14** – reviewed the Runway 5 end, Runway 23 end, Area 5, ILS road tree clearing operations, and stormwater headwalls. The site was generally in good condition and erosion controls were holding up nicely.

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: **The EM recommends that erosion controls are reestablished immediately along the ILS road and erosion controls are repaired or replaced as necessary within the MALSR areas before additional heavy equipment work occurs in these areas.**

Are sediment/pollution discharges from the site present?

no yes If yes, describe: **One new release as noted above within the MALSR area. This sediment release was hand cleared and hay was used for stabilization. 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: **Reestablish sediment controls along the ILS road and MALSR as needed. 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



Erosion controls at Area 5, north of New Plainville Road.



View of MALSR fill area, last light pole for Runway 23 end, north of New Plainville Road.



View of soil stockpiles within the contractor laydown area.



View of headwall outfall from Catch Basin 1, water at this catch basin has been clear. Photo taken on 8/14/14 after 0.5 inch rain event.



View of water down gradient from headwall (CB#1) in west ditch.



View of infiltration trench and west side of Runway after rain event.



View of infiltration trench after rain event.



View of southern headwall from infiltration trench. No water has been observed in this headwall in the past two weeks.



View of headwall leading from Catch Basin 11. This catch basin has been closed off for weeks, no change in water turbidity.



View of water downgradient of CB11 headwall. No appreciable sediment has accumulated.



This catch basin 11 has been taken off line. Erosion controls are in good condition.



View of Runway 23 end interim condition.



View of paving operations at Runway 23 end.



View of stressed dogwood previously reinstalled by site contractor in west ditch restoration area.



View of blow out area from the 2 inch rain in late July. This area is starting to reestablish.



View of regraded slope next to Taxiway A – 5 end, and new taxiway lights.



View of hydroseeding the infield adjacent to catch basin 11.



View of logging stockpile and processing operations.



View of newly discovered turtle during the Dartmouth turtle sweeps. This turtle has been processed and will be released after turtle sweeps are completed for the day. Photo taken 8/14/14.



View of ILS road from 8/14/14. Generally in good condition.



Close up of ILS wood chips on 8/14/14.



View of dragging slash on 8/14/14.



View of ongoing logging operations as of 8/14/14.



View of repaired erosion controls on Runway 5 end MALSR prior to work.



View of erosion controls on Runway 5 end MALSR, second to last light pole area. It appears that heavy machinery brought down a portion of the silt fence. The EM reported this to WS.



View of sediment removed from wetland adjacent to the second to last light pole MALSR work area, silt fence is still in poor condition.



View of last light pole MALSR work area. Silt fence should be restored in this area too.



View of ILS road after pavement was rototilled. Erosion controls adjacent to work are in fair condition in this area.



View of ILS road after pavement was rototilled. Erosion controls adjacent to work are in poor condition in this area. EM recommended that no work occur until erosion controls are reestablished and that erosion controls be placed as soon as possible.



View of tree contractor pulling timber mat road.



View of abandoned timber mat road.



View of installed fiber rolls within the Dartmouth tree clearing area.