INDEPENDENT OBSERVER REPORT

	GZA GeoEnvironmental Inc.	**REPORT NO: 52** **DATE: July 16, 2014**	**Page 1 of 6**
		PROJECT No:	**15.0166235.30**
		LOCATION:	**New Bedford Regional Airport New Bedford, MA**
		PHOTOS: 1-8	

PROJECT: Reconstruct, Mark and Groove Runway 5-23, DEP File #SE-049-0635, NHESP File No. 96-0737

Weather: Raining, 72ºF, 1.8" of rain per www.wunderground.com	**Observer: Seth Taylor, Dan Nitzsche**

OBSERVATIONS & RECOMMENDATIONS:

Overview: July 16, 2014

The IO conducted a site inspection today since the weather prediction was for heavy rain and no regularly scheduled weekly Construction Meeting was set for this week due to the 81 hour paving program. The site received approximately 1.8" of rain overnight into the mid-day hours. We observed the high water overwhelming sections of the sediment control barriers and turbid water was discharging into adjacent wetlands.

The Contractor was only working in the intersections of the RW5/23 and RW14/32. All other work was suspended.

Phase 4 Observations: July 16, 2014

RW5 & West Ditch Area

1. It appears that one hay bale was removed along a section of sedimentation barrier along the RW5 haul road. It was difficult to determine how but the bottom flap of the barrier was elevated allow flow to pass beneath the barrier (**Photo 1**) The removed hay bale was observed on the wetland side of the barrier and the bypassing flow was observed to be turbid (**Photo 2**).
2. Dewatering activities appear to have been ceased at the time of the inspection but several pump lines were observed to be setup to discharge water to the infiltration trench along RW5 (**Photo 3**).
3. The flow from the infiltration trench is being conveyed to the wetland via the culvert outlet. Turbid flow was observed entering the adjacent wetland (**Photo 4**).
4. A catch basin in the infield of the RW5 area was conveying dirty water that was ponded in the work area. The compost tube appeared to be floating and not secured (**Photo 5**). The inflow is being discharged to the outlet structure south of Taxiway A (Sta. 11+00) and overwhelming the barrier.
5. The silt fence/hay bale barrier was overwhelmed by the flood water and dirty water was entering the adjacent wetland (**Photo 6**).

RW23 RSA

Water was observed passing through the silt fence and hay bale barrier (**Photo 7**). The flow was discolored but assumed to be from organics leaching from the hay bales (**Photo 8**) than from sediment as the ponded water on the runway side of the barrier was observed to be fairly clear with very little suspended material.

Recommendations

1. **Replace the removed hay bale (Photo 1) and reinstall the bottom silt fence flap into the ground.**
2. **The use of powdered flocculent on the disturbed soils would provide some degree of sediment reduction and adhesion to the barriers prior to flows passing into the wetlands.**
3. **Repair or replace the inlet protection (Photo 5).**
4. **Repair or replace other damaged barrier locations.**
5. **Consider using sediment logs at the distal end of the infiltration trench to better clean up sediment before flow enters the outlet culvert.**
6. **Monitor weather and plan work accordingly. As occurred today, not working during a large rain event is a BMP.**

OBSERVATION DOCUMENTATION – DEP File # SE-049-0635
PHOTO DATE: 7/16/2014

Photo 1: **It appears that one hay bale was removed along a section of sedimentation barrier along the RW5 haul road. It was difficult to determine how, but the bottom flap of the barrier was elevated resulting in flow bypassing the barrier.**

View Facing: East

Photo 2: The removed hay bale was observed on the wetland side of the barrier and the bypassing flow was observed to be turbid.

View Facing: West

Photo 3: **Dewatering activities appear to have been ceased at the time of the inspection but several pump lines were observed to be setup to discharge water to the infiltration trench along RW5.**

View Facing: Southwest

Photo 4: **The dirty flow from the infiltration trench is being conveyed to the wetland via the culvert system.**

View Facing: Northeast

Photo 5: **A catch basin in the infield of the RW5 area was conveying dirty water from the ponded work area.**

The inlet protection/compost tube appeared to be floating and not secured or stopping sediment.

View Facing: West

Photo 6: **The silt fence/hay bale barrier was overwhelmed by the flood water and dirty water was entering the adjacent wetland.**

View Facing: South

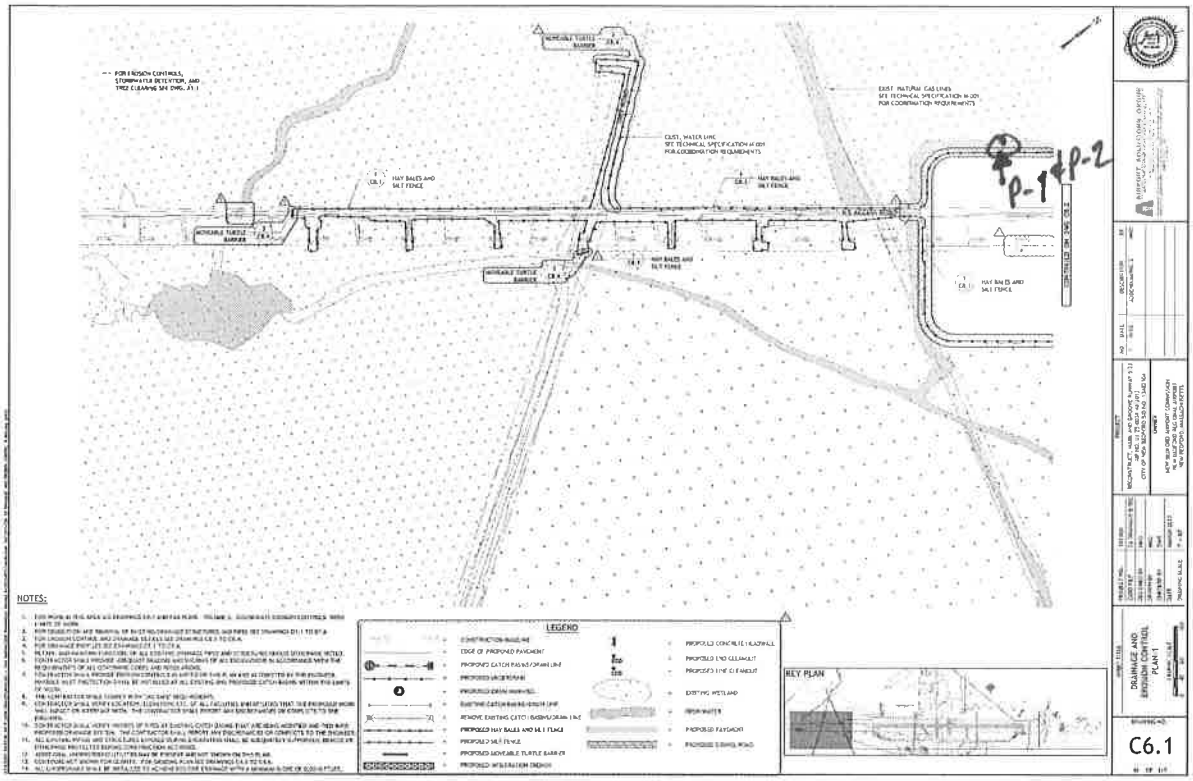
Photo 7: Water was observed passing through the silt fence and hay bale barrier.

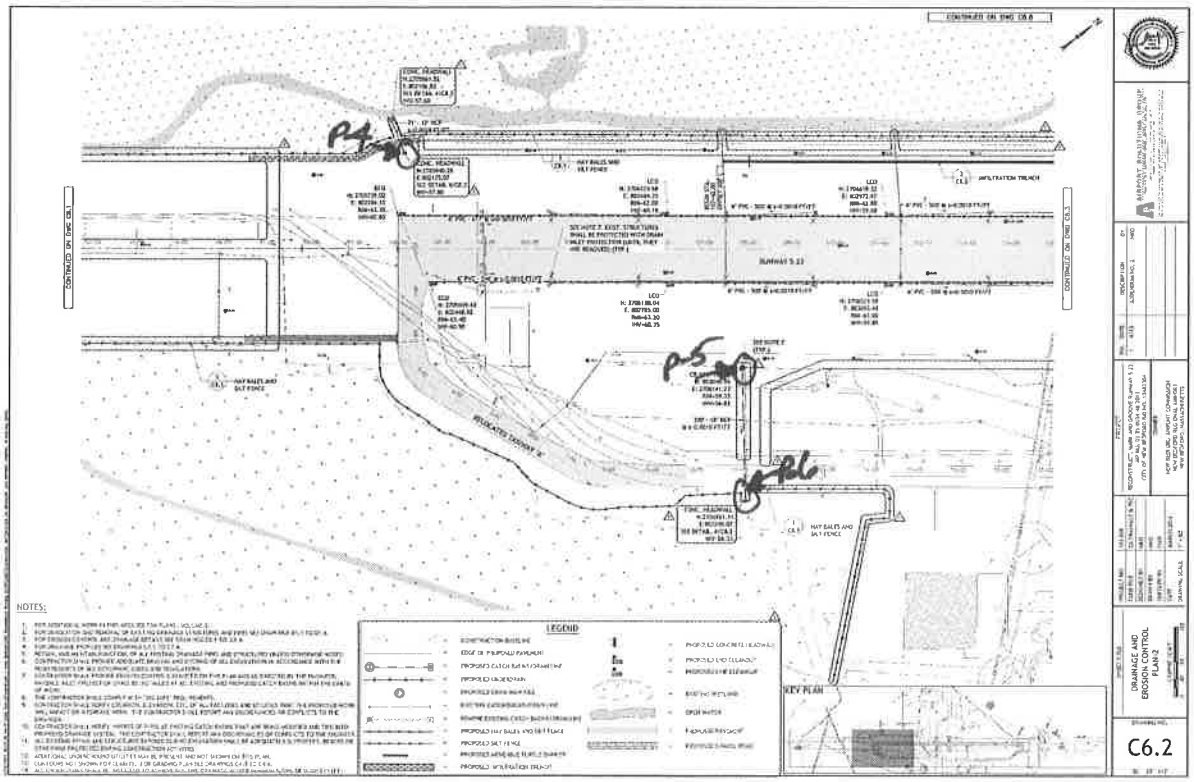
View Facing: North

Photo 8: The flow was discolored but may be more from organics leaching out of the hay bales than from sediment as the ponded water on the runway side of the barrier was observed to be fairly clear with very little suspended material.

View Facing: North

Photo Reference Sheets - EWB 7/16/14





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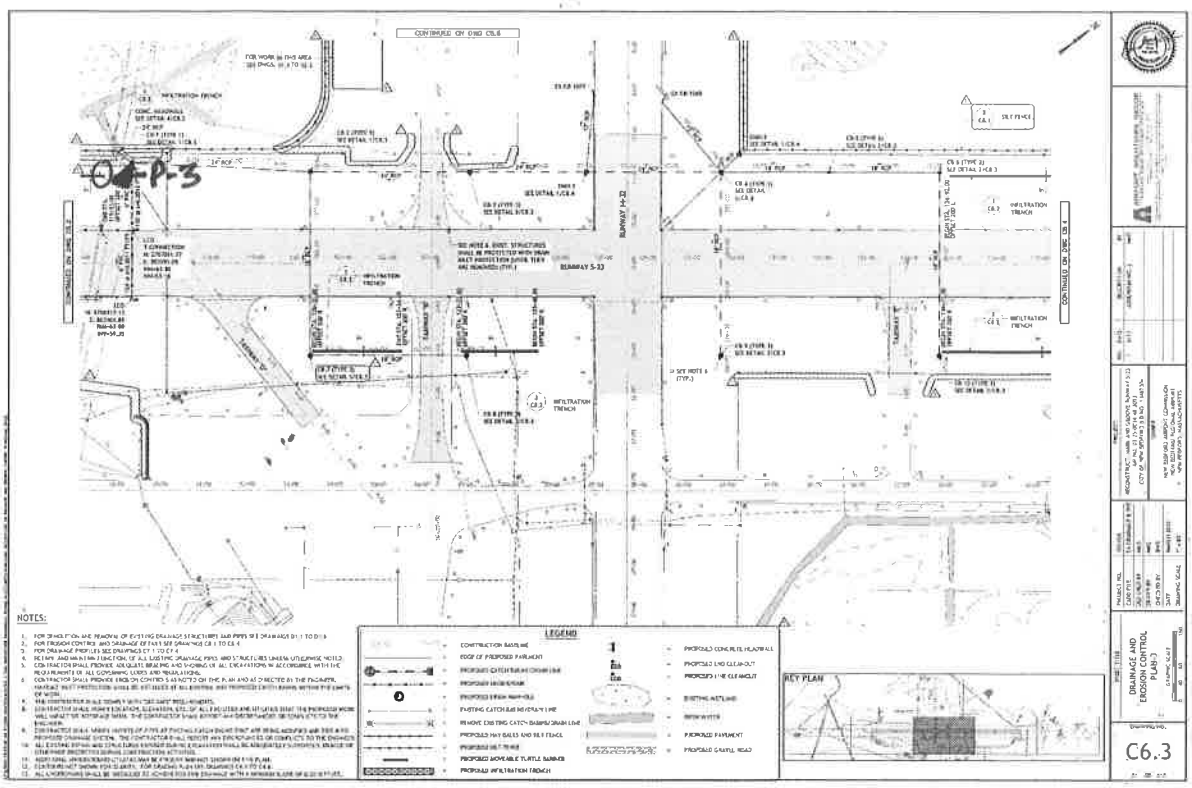
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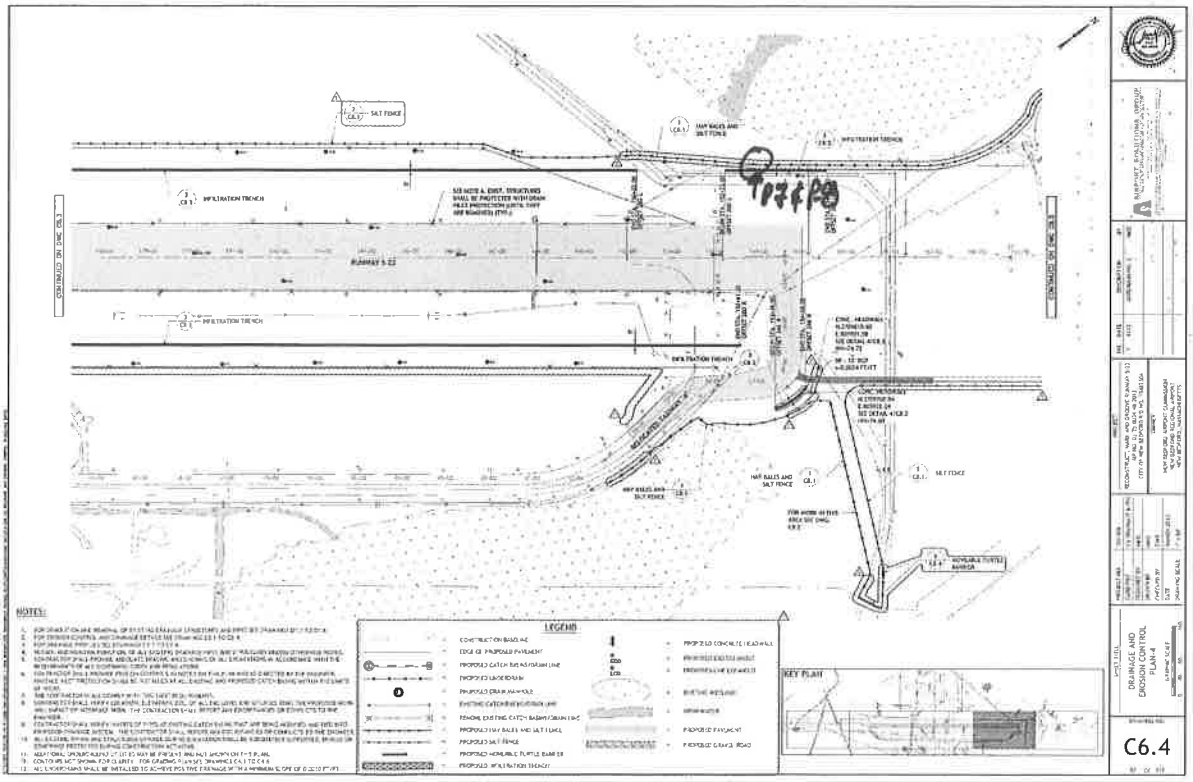
RUNWAY 14-32
RUNWAY 5-23
INFILTRATION TRENCH
SILT FENCE
HAY BALES AND SILT FENCE
NOTES:
LEGEND
KEY PLAN
DRAINAGE AND EROSION CONTROL PLAN-3
C6.3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