



MEMORANDUM

TO: Kristina Handt, Administrator, City of Scandia

FROM: Jed Chesnut, Wetland/Natural Resource Specialist

DATE: October 7, 2013

RE: **Zavoral Mining and Reclamation Project – Monitoring and Inspection Report 1 – Fall, 2013**

As per the contract (13-01) between the Washington Conservation District (WCD) and the City of Scandia (City), WCD staff performed document review, site inspection and monitoring tasks pertaining to Technical Services 3,4,5 of Exhibit B. This memorandum serves as a summary of those activities and reviews. The site inspection took place on Wednesday, October 2, 2013. Christina Morrison of Tiller Corporation (Tiller) was present and provided a descriptive tour of the project area. Each service area is listed below with a summary description of results.

1. Technical Service 3 – Erosion and Sediment Control Inspections
 - a. Task 1 – Site Inspection
 - i. Vegetation removal and Phase I of the reclamation activities were in process during the site visit. Silt fence had been installed as per the stormwater pollution and prevention plan (SWPPP) in a majority of the site, primarily where land disturbing activities were taking place. There were a few minor deviations where the current site conditions (undisturbed) and project extents did not require the presence of perimeter control. For example, in the northern portion of the project area, just north of the existing access road, no land disturbing activities had occurred and therefore, silt fence was not installed. The current plan according to Tiller's representative is to leave this area vegetated and not mined. The original and permitted plan proposed mining in this area and therefore the installation of a double row of silt fence was indicated on the SWPPP. Since this area was undisturbed, the silt fence was not necessary. WCD recommended that Tiller include any such deviation in their annual submittals to the City.
 - ii. Mining activities have not been initiated.
 - iii. There were vegetation removal activities near where Mr. Zavoral's driveway begins its descent down the bluff to the railroad tracks. There was a gap in the perimeter control on the south side of the driveway and perimeter control on the north side along the steep slope adjacent to the drive. Tiller's representative noted that this area was being actively worked and that silt fence hadn't been installed due to access requirements. There are bio-rolls onsite and Tiller's representative committed to installing these as temporary erosion control until the silt fence is installed.
 - iv. The silt fence along the south and southeastern project limits was adequately installed. A small section of fencing had been lifted out of the ground and Tiller's representative said it would be repaired that day.
 - v. Tiller's representative stated that they have a large supply of bio-rolls on site for emergency sediment control, if necessary.

2. Technical Service 4 – Threatened and Endangered Species
 - a. Task 1 – Review Blanding’s Turtle Documentation and Conduct Site Review
WCD received and reviewed Tiller’s Standard Operating Procedures (SOP) for operations near Blanding’s Turtles. Tiller’s Blanding’s Turtle SOP appear to be in compliance with the conditional use permit requirements (condition number 20). Some of the DNR’s recommendations are not applicable in this instance (e.g. there are no roads, wetlands, culverts, etc within the project area) and therefore were not included in the review for compliance with the Conditional Use Permit. Silt fence has not been installed around the entire perimeter of the mining area; however, silt fence has been or will be installed in areas where Blanding’s turtles may likely be found.
 - b. Task 2 – Annual Inspection of Site and Monitor T&E Listing Status of Butternut Tree
The status of the butternut tree (*Juglans cinerea*) has been changed to “endangered” as of August 19, 2013. As a result, removal of a butternut tree after August 19, 2013 would require permitting from the Department of Natural Resources. One non-diseased tree has been identified on the property. WCD staff attempted to locate the tree during the site visit to verify its presence. Its location was not verified, but WCD has asked Tiller to locate the tree and it will be revisited during the next site visit. Tiller’s representative did say the tree has not been removed as part of the mining project.
3. Technical Service 5: Reclamation Plan Review and Inspection
 - a. Task 1 – Review Zavoral Reclamation Plan
WCD has received and review the updated Zavoral Mining Reclamation Plan. The plan is consistent with the requirements set forth in the City’s Conditional Use Permit.
 - b. Task 2 – Conduct Site Inspections to Verify Implementation of the Restoration Plan
Phase 1 of the reclamation was underway during the October 2nd site visit. Since the reclamation had started recently, no project “milestones” were anticipated during the review. However, a few items to note were as follows:
 - i. Rough grading of the Phase 1 area had been completed
 - ii. The eastern “sliver” of Phase 1 reclamation along the wooded bluff was originally planned to be converted from a wooded habitat to prairie. This conversion was thought necessary due to the need to match the final proposed reclaimed elevations. However, the applicant was able to leave this wooded area undisturbed since the grading will match. This is a better outcome since this area is now not disturbed and will be an additional naturalized buffer.
 - iii. Tiller’s representative noted that the tree transplantation efforts have been challenging due to the poor soil conditions on the site. The problems described included the ground being too rocky for the tree spade to effectively dig out the root systems, or when the tree is removed, the sandy material drops out leaving exposed root balls and therefore killing the tree. So far, a few trees have been transplanted and many more were marked for transplantation. Upon completion of the tree transplantation activities, WCD will monitor for survivability as per the City’s Conditional Use Permit.
 - iv. There is a large spoil pile of material on-site that was from the previous mining operations. This material is suitable, and therefore will be used, as a component of the “top soil” material that is specified in the reclamation plan. To minimize the spread of the seed source of invasive plant species, Tiller’s representative stated that they would be removing the top six inches of the spoil pile material. This top six inches will not be utilized in the reclaimed areas.

This ends the reporting of WCD’s initial monitoring activities. As of October 2, 2013, mining activities had not begun within the Zavoral Mine and Reclamation project area. Upon the initiation of mining activities, WCD’s monitoring activities will be adjusted accordingly as per WCD’s contract with the City. Please call me with any questions at 651-275-1136 x25.