Task 2b BMP Construction Compliance Report for
Optimal Design of Stormwater Basins with Bio-Sorption Activated Media (BAM) in Karst Environments – Phase II: Field Testing of BMPs

BDV24-977-20

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June 2017

Task 2b BMP Construction Compliance Report
Date: June 30, 2017

TO: Katey Earp, FDOT

Name: Optimal Design of Stormwater Basins with Bio-Sorption Activated Media (BAM) in Karst Environments – Phase II: Field Testing of BMPs

Deliverable for Task 2b: March 1, 2017 – June 30, 2017

UCF Account #: 16207104 and 16207105
Agency number: BDV24 977-20

This is a report on the second deliverable. It is a report detailing review and coordination with FDOT regarding construction of selected BAM-based treatment alternatives for testing BMPs within two stormwater basins under different hydrogeological conditions.

Statement of Task 2b

Coordination for Construction within an FDOT System - construction of a BAM retrofit application within a permitted FDOT stormwater system will require an additional level of coordination and review to ensure the BAM retrofit application adheres to FDOT design standards and does not impact the function of the system for which it was originally designed.

Statement of Deliverable for Task 2b

Throughout T2a, the principal investigator will coordinate construction efforts with the FDOT Project Team, including District 5 staff, for the purpose of ensuring compliance with FDOT construction requirements. Upon completion of Task 2a, the principal investigator will submit a written report detailing how the construction of the selected alternatives at the two stormwater basins meet the FDOT standards for construction. The principal investigator will submit this report to the research.center@dot.state.fl.us and conduct a conference call meeting with the project manager and members of the project team to discuss the construction details.
Work Performed During This Deliverable Time Period

1. Selected BAM-based treatment alternatives were constructed for testing BMPs within two stormwater basins under different hydrogeological conditions.
2. Design team maintained communication with FDOT throughout the construction period, ensuring compliance with FDOT design standards.

Field visit with FDOT Gopher Tortoise consultant

Prior to construction, on April 27, 2017, UCF personnel and the contractor met Ben Shepherd, FDOT District 5 gopher tortoise consultant at Basin 2. Ben Shepherd supervised the fencing of previously-identified gopher tortoise burrows. Silt fencing was installed to temporarily prevent gopher tortoises from accessing the site during the construction period.

Field visit with FDOT and Project Guidance Committee members

On May 3, 2017, FDOT staff and Project Guidance Committee members gathered with UCF personnel to visit the project sites during construction. Maintenance staff and contractors from FDOT District 5 were also in attendance.

Field Day attendees:

- Carl Spirio (FDOT Central Office)
- Rick Jenkins (FDOT Central Office)
- Jenna Bowman (FDOT Central Office)
- Fred Noble (FDOT Central Office)
- Karen Snyder (FDOT D5)
- Scott Stutson and maintenance contractors (FDOT D5)
- Monte Ritter (SWFWMD)
- Kelly Kibler (UCF)
- Nyle Rice (UCF)
- Dan Wen (UCF)

Field day attendees were issued copies of the final design drawings and had opportunity to ask questions about the design and witness ongoing construction. While many questions pertaining to the design were answered by UCF personnel, there were no changes to the proposed design or agreed maintenance schedule based on the field visit.
Fig. 1: Field day attendees from FDOT, UCF, and Project Guidance Committee discuss the proposed design in Basin 2. 05/03/2017
Fig. 2: Field day attendees from FDOT, UCF, and Project Guidance Committee discuss the proposed design in Basin 9b. 05/03/2017
Work To Be Performed in the Next Deliverable Time Period (before December 2017)

1. Sampling will begin immediately. We will detail results of initial sampling in an interim report at the end of the year.

Requested Modifications

None at this time.

Research Impediments

None at this time.

Respectfully Submitted,

Kelly M. Kibler, Ph.D.