



Interoffice Memorandum

APPROVED
BY ORANGE COUNTY BOARD
OF COUNTY COMMISSIONERS
SEP 22 2015 CAS/LC

AGENDA ITEM

August 26, 2015

TO: Mayor Teresa Jacobs
—AND—
Board of County Commissioners

FROM: Jon V. Weiss, P.E., Director *J.V.*
Community, Environmental and Development
Services Department

CONTACT PERSON: **Lori Cunniff, CEP, CHMM, Deputy Director**
Community, Environmental and Development
Services Department
(407) 836-1405 *L. Cunniff*

SUBJECT: September 22, 2015 — Consent Item
Florida Department of Environmental Protection Section 319 Grant
Agreement No. G0335 for Lake Down Sub-Basin 15 Alum
Stormwater Treatment System

The Environmental Protection Division (EPD) is requesting approval of the Second Amendment to the Florida Department of Environmental Protection (FDEP) Section 319 Grant Agreement No. G0335 (Agreement) for the Lake Down Sub-Basin 15 Alum Stormwater Treatment System.

On May 22, 2012, the Board of County Commissioners (BCC) approved the original Agreement for the Lake Down Sub-Basin 15 Alum Stormwater Treatment System in the amount up to \$790,000. On July 14, 2015, the BCC approved the First Amendment to the Agreement which extended the completion date for the project from July 18, 2015 to September 30, 2015.

Lake Down Sub-basin 15 is a 377.5 acre basin which contributes 49.4% of the runoff generated phosphorus loadings to Lake Down and 27% of the total annual phosphorus inputs to the lake. This sub-basin discharges through a well defined channel into the northwest lobe of Lake Down. An off-line alum treatment system will be constructed on a 5.24 acre parcel upstream from Lake Down. The system will provide alum treatment for discharges through the channel, with an estimated inflow of 348 ac-ft/yr. A 3.5 acre alum flocculant (floc) settling pond will be constructed with the additional land used for the pump building, alum storage tanks and staging for a future floc drying area. The project will reduce phosphorus loadings to Lake Down by approximately 182 kg/yr. A post-construction monitoring program will be conducted to determine the treatment

Page Two

September 22, 2015 – Consent Item

Florida Department of Environmental Protection Section 319 Grant Agreement No. G0335 for Lake Down Sub-Basin 15 Alum Stormwater Treatment System

effectiveness of the system. The area will also be used as an educational facility and displays will be constructed to educate the public about stormwater pollution and treatment.

The Second Amendment reallocates funding to accurately reflect costs between the project's excavation and construction tasks.

The Second Amendment to the FDEP Grant Agreement No. G0335 was reviewed by the County Attorney's Office and approved as to form.

ACTION REQUESTED: Approval of DEP Agreement No. G0335 Amendment No. 2 between the State of Florida Department of Environmental Protection and Orange County, Florida for Lake Down Sub-Basin 15 Alum Stormwater Treatment System. District 1

JVW/LC: mg

Attachments

APPROVED
BY ORANGE COUNTY BOARD
OF COUNTY COMMISSIONERS
SEP 22 2015 CAS/LC

DEP AGREEMENT NO. G0335
AMENDMENT NO. 2

THIS AGREEMENT as entered into on the 18th day of June, 2012, and amended on the 7th day of July, 2015, between the STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (hereinafter referred to as the "Department") and ORANGE COUNTY, FLORIDA, a Charter County and political subdivision of the State of Florida (hereinafter referred to as the "Grantee") is hereby amended.

WHEREAS, the Grantee has requested and the Department has agreed that funding needs to be reallocated to accurately reflect costs between the project's excavation and constructions tasks; and,

WHEREAS, other changes to the Agreement are necessary.

NOW, THEREFORE, the parties hereto agree as follows:

- Attachment A, Grant Work Plan, is hereby deleted in its entirety and replaced with **Attachment A-1, Revised Grant Work Plan**, attached hereto and made a part of the Agreement. All references in the Agreement to Attachment A shall hereinafter refer to **Attachment A-1, Revised Grant Work Plan**.

In all other respects, the Agreement of which this is an Amendment, and attachments relative thereto, shall remain in full force and effect.

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IN WITNESS WHEREOF, the parties have caused this Amendment to be duly executed the day and year last written below.

ORANGE COUNTY, FLORIDA
By: Board of County Commissioners

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

By: *Teresa Jacobs*
Title: Teresa Jacobs, County Mayor
Date: 9.22.15

By: *[Signature]*
Secretary or Designee
Date: 9/28/15

ATTEST: Martha O. Haynie, County Comptroller
As Clerk of the Board of County Commissioners

Misty Alderman
Misty Alderman, DEP Grant Manager
Dorine Alb
DEP Contracts Administrator

By: *Craig Stopera*
for Deputy Clerk



Approved as to form and legality:
Jessie M. Duchene
DEP Attorney

*For Agreements with governmental boards/commissions: If someone other than the Chairman signs this Amendment, a resolution, statement or other document authorizing that person to sign the Amendment on behalf of the Grantee must accompany the Amendment.

List of attachments/exhibits included as part of this Amendment:

Specify Type	Letter/Number	Description (include number of pages)
Attachment	A-1	Revised Grant Work Plan (7 Pages)

ATTACHMENT A-1 REVISED GRANT WORK PLAN

PROJECT NAME: Lake Down Sub-Basin 15 Alum Stormwater Treatment System

PROJECT FUNDING: \$790,000 **MATCH:** \$912,046.86

LEAD ORGANIZATION: Orange County Environmental Protection Division

PROJECT LOCATION AND WATERSHED CHARACTERISTICS:

Geographic Location: Orange County, Florida
Impacted Watershed Name: Cypress Creek/Kissimmee River
Size of Project Impact: 3.5 acres (size of treatment pond)
Size of Area Being Treated: 377.5 acres
Latitude: 28.516650
Longitude: 81.537243

PROJECT OVERVIEW: Lake Down Sub-basin 15 is a 377.5-acre basin which contributes 49.4% of the runoff generated phosphorus loadings to Lake Down and 27% of the total annual phosphorus inputs to the lake. This sub-basin discharges through a well-defined channel into the northwest lobe of Lake Down. An off-line alum treatment system will be constructed on a 5.24-acre parcel upstream from Lake Down. The system will provide alum treatment for discharges through the channel, with an estimated annual inflow of 348 ac-ft/yr. A 3.5-acre alum flocculant (floc) settling pond will be constructed with the additional land used for the pump building, alum storage tanks, and staging for a future floc drying area. Based on the anticipated runoff volume and floc generation rate, this site will provide about 35-40 years of floc storage before removal would be required. The project will reduce phosphorus loadings to Lake Down by approximately 182 kg/yr at an estimated 20-year present worth cost of \$882/kg of total phosphorus removed. A post-construction monitoring program will be conducted to determine the treatment effectiveness of the system. The area will also be used as an educational facility, and displays will be constructed to educate the public about stormwater pollution and treatment.

TASKS and DELIVERABLES:

TASK NUMBER 1

TASK NAME: Design and Permitting

TASK DESCRIPTION: The Grantee shall design the system as described in Task 3 & 4 (Best Management Practices (BMP) Construction) and obtain all necessary permits.

DELIVERABLES: Paper and electronic copy of final design(s) and all required permits.

PERFORMANCE STANDARD: The Department's Grant Manager will review the final design(s) and permits to verify that they meet the specifications in the Revised Grant Work Plan and this task description.

TASK NUMBER 2

TASK NAME: Bidding

TASK DESCRIPTION: The Grantee shall prepare and solicit bids utilizing a bid package in accordance with state and federal laws and this contract agreement.

DELIVERABLES: Submission of copy of bid package and selection of contractor.

PERFORMANCE STANDARD: The Department's Grant Manager will review the bid package and copy of subcontract(s) to verify that they meet the specifications in the Revised Grant Work Plan and this task description.

Position	Maximum Hours	Hourly Rate	Fringe Benefit (%)	Maximum Total Fringe per position	Maximum Total per position
Senior Environmental Specialist	160	\$25.30	37.86%	\$1,532.50	\$5,580.50
TOTAL	160	\$25.30	37.86%	\$1,532.50	\$5,580.50

TASK NUMBER 3

TASK NAME: BMP Construction Mobilization and Excavation of alum floc settling pond

TASK DESCRIPTION: A 3.5-acre alum floc settling pond will be constructed with the additional land used for the pump building, alum storage tanks, and staging for a future floc drying area. Based on the anticipated runoff volume and floc generation rate, this site will provide about 35-40 years of floc storage before removal would be required.

DELIVERABLES: Excavated Pond constructed as described in this task, as evidenced by: (1) Dated color photographs of the construction site(s) prior to, during, and immediately following completion of the task; (2) signed statement of acceptance of the completed task by the Grantee.

PERFORMANCE STANDARD: The Department's Grant Manager will review the dated photographs and signed statement of acceptance to verify that they meet the specifications in the Revised Grant Work Plan and this task description.

TASK NUMBER 4

TASK NAME: BMP Construction – Completion of alum building & structures

TASK DESCRIPTION: The Grantee shall construct a 500 square foot building to house the electronic controls, flow monitoring equipment, and alum pumping equipment, along with a 5000-gallon alum storage tank and associated structures (inflow/outflow pipes, low head weir or water diversion structures). DEP Grant Funding will only be applied to allowable activities that are completed by the end of this Agreement (September 30, 2015). Any remaining work necessary to complete Task 4 that occurs after September 30, 2015, must be paid for using Grantee's own funds.

The Grantee shall submit a construction activity package to the Department for task work completed through the end of this Agreement. This construction activity package must include:

- (1) An itemized summary of the materials, labor, or services to identify the nature of the work performed; the amount expended for such work; and the name of the person/entity providing the service or performing the work; and proof of payment of the invoices; and
- (2) A certification signed by the Grantee's Grant Manager (Exhibit 1) as to the current cost of the Project; that the materials, labor, or services represented by the invoice have been satisfactorily purchased or performed and applied to the project; that all funds expended to date have been applied toward completing the Project; and,
- (3) A certification, signed and sealed, by the Engineer responsible for overseeing construction (Exhibit 2) stating that equipment, materials, labor and services represented by the construction invoices have been satisfactorily invoiced, purchased, received, approved and applied to the Project, as described in the Revised Grant Work Plan, in accordance with construction contract documents; that payment is in accordance with construction contract provisions; that construction, up to the point of the request, is in compliance with the contract documents; and identifying all additions or deletions to the Project which have altered the Project's performance standards, scope, or purpose since the issue of required construction permits.

DELIVERABLES: The construction activity package, as described above in the "Task Description"; dated photographs of construction progress.

PERFORMANCE STANDARD: The Department's Grant Manager will review the construction package and photographs to verify that the work submitted through the end of the Agreement was performed in accordance with the construction contract documents and specifications in this task description.

TASK NUMBER 5

TASK NAME: BMP Effectiveness Monitoring

TASK DESCRIPTION: The Grantee must complete and submit to the Department a Quality Assurance Project Plan (QAPP) for monitoring prior to commencement of any monitoring. The monitoring plan will specify the sampling locations, sampling instruments, and parameters to be sampled. The parameters shall include, but are not limited to: Total Nitrogen (TN) (lbs/yr), Total Phosphorus (TP) (lbs/yr), Total Suspended Solids (TSS) (lbs/yr), Cadmium (Cd), Chromium (Cr), Copper (Cu), Zinc (Zn), Nitrite/Nitrate (NO₂/NO₃), Total Kjeldahl Nitrogen (TKN), Ammonia (NH₃), Orthophosphate, oil/grease, Fecal coliform, rainfall and flow. Monitored events shall include a maximum of 7 – 10 discrete rain events, generally greater than 0.20 inches and less than 1.5 inches. Monitoring shall be performed at inflow and outflow locations of each BMP installed and in accordance with the approved QAPP. Sampling locations shall be recorded and verified using a Global Positioning System (GPS) device. Project-specific details must be added

during QAPP development. This task includes purchasing and installing two (2) water quality monitoring autosamplers.

DELIVERABLES: Implementation of a Department-approved QAPP

PERFORMANCE STANDARD: Submission of draft QAPP, which will be reviewed by the Department for compliance with this Agreement and the Department's Standard Operating Procedures for monitoring; submission of approved QAPP; and submission of monitoring results.

TASK NUMBER 6

TASK NAME: Public Education

TASK DESCRIPTION: A neighborhood meeting will be conducted to educate and involve local residents in the stormwater BMP design process. Land owners adjacent to the project site will be informed of the proposed activities so that potential concerns can be expressed. Periodic meetings will also be held with the Butler Chain-of-Lakes Advisory Board and Windermere Water and Navigation Control District to provide information on the progress of the project. An information kiosk (sheltered educational kiosk with three 2'x 3' custom side panels) will be installed at the project site to provide information on stormwater management and the specifics of the treatment process.

DELIVERABLES: An information kiosk will be installed at the project site to provide information on stormwater management and the specifics of the treatment process.

PERFORMANCE STANDARD: Submission of photographs of kiosk, as well as a map depicting its location relative to the site will be reviewed for compliance with approved plans and permits.

Position	Maximum Hours	Hourly Rate	Fringe Benefit (%)	Maximum Total Fringe per position	Maximum Total per position
Senior Environmental Specialist	40	\$25.30	37.86%	\$383.14	\$1,395.14
TOTAL	40	\$25.30	37.86%	\$383.14	\$1,395.14

TASK NUMBER 7

TASK NAME: Draft and Final Reports

TASK DESCRIPTION: The Grantee shall submit to the Department a Final Report. The Final Report is intended to capture the outcome and results of the selected project, including all tasks included in this project. It shall include, at least, the following: a summary of monitoring results and an explanation of any unexpected monitoring results or unexpected occurrences. This shall include, where applicable, why a BMP did not obtain or exceed the expected removal efficiency; any problems encountered and how those problems were overcome; an explanation of any project delays; a brief summary of any additional phases yet to be completed; and any additional information which explains the results of the project. The Grantee shall submit the final report as a draft prior to submitting the final report for project closeout.

DELIVERABLES: Draft final report; approved final report that meets all of the requirements identified in the task description.

PERFORMANCE STANDARD: Submission of Final Report, which will be reviewed by the Department Grant Manager for compliance with this agreement.

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TIMELINE: The task must be completed and all deliverables received by the end of each task timeline. For the 319(h) grant funded and required match funded tasks, if there are any conflicts between the completion dates in the task timeline below and the grant end date, September 30, 2015, then the grant end date shall be used.

Task No.	Task Title	Start	Complete
1	Design And Permitting	Month 1	March 1, 2014
2	Bidding	March 1, 2014	December 1, 2014
3	BMP Construction - Mobilization And Excavation Of Alum Flocc Settling Pond	December 1, 2014	September 30, 2015
4	BMP Construction - Completion Of Alum Building & Structures	February 1, 2015	September 30, 2015
5	BMP Effectiveness Monitoring	July 1, 2015	September 30, 2015
6	Public Education	July 1, 2015	September 30, 2015
7	Draft And Final Reports	September 1, 2015	September 30, 2015

PROJECT BUDGET BY CATEGORY and TASK:

Task No.	Category	Grant Funding	Match Funding	Match Source	Additional Required Expenditures (not required match)
1	Design Contractual	\$0	\$103,734.36	Grantee	
	TOTAL FOR TASK	\$0	\$103,734.36		
2	Salaries	\$0	\$4,048.00	Grantee	
	Fringe Benefits	\$0	\$1,532.50	Grantee	
	Total for Task	\$0	\$5,580.50		
3	Const. Contractual	\$430,000.00	\$454,442.00	Grantee	
	Total for Task	\$430,000.00	\$454,442.00		
4	Const. Contractual	\$360,000.00	\$348,290.00	Grantee	
	Total for Task	\$360,000.00	\$348,290.00		
5	Monitoring Contractual	\$0	\$0		\$25,000.00
	Equipment Purchases	\$0	\$0		\$21,558.00
	Total for Task	\$0	\$0		\$46,558.00
6	Salaries	\$0	\$0		\$1,012.00
	Fringe Benefits	\$0	\$0		\$383.14
	Supplies/Other Expenses (Educational Kiosk)	\$0	\$0		\$10,000
	Total for Task	\$0	\$0		\$11,395.14
7	Contractual	\$0	\$0		\$10,000.00
	Total for Task	\$0	\$0		\$10,000.00
Total:		\$790,000.00	\$912,046.86		\$67,953.14
Total Project Cost:		\$1,770,000.00			
Percentage Match:		45%	51%		4%

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PROJECT BUDGET CATEGORY TOTALS:

Category Totals	Grant Funding	Match Funding	Match Source	Additional Required Expenditures (not required match)
Salaries Total	\$0	\$4,048.00	Grantee	\$1,012.00
Fringe Benefits Total	\$0	\$1,532.50	Grantee	\$383.14
Travel Total	\$0	\$0		
Contractual Total	\$790,000.00	\$906,466.36	Grantee	\$35,000.00
Equipment Purchases Total	\$0	\$0		\$21,558.00
Supplies/Other Expenses Total (Educational Kiosk)	\$0	\$0		\$10,000.00
Land Total	\$0	\$0		
Indirect Total	\$0	\$0		
Total:	\$790,000.00	\$912,046.86		\$67,953.14
Total Project Cost:	\$1,770,000.00			
Percentage Match:	45%	51%		4%

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Exhibit 1
Grant Manager's Certification

I, _____,
(Print name of Grantee's Grant Manager designated in the Agreement)

on behalf of _____, do hereby certify that:
(Print name of Grantee/Recipient)

1. The disbursement amount requested is for allowable costs for the project described in Attachment A-1 of the Agreement;
2. All costs included in the amount requested have been satisfactorily purchased, performed, received, and applied toward completing the project; such costs are documented by invoices or other appropriate documentation as required in paragraph 3D;
3. The Grantee has paid such costs under the terms and provisions of contracts relating directly to the project; and the Grantee is not in default of any terms or provisions of the contracts; and
4. All permits and approvals required for the construction which is underway have been obtained.

Grantee's Grant Manager's Signature and Date

Exhibit 2
Engineer's Certification of Disbursement Request

I, _____, being the Professional Engineer retained by
(name of Professional Engineer)

_____, am responsible for overseeing construction of the
(name of Grantee/Recipient)
project described in the Agreement and do hereby certify that:

1. Equipment, materials, labor, and services represented by the construction invoices have been satisfactorily purchased or received and applied to the project in accordance with construction contract documents filed with and previously approved by the Department of Environmental Protection;
2. Payment is in accordance with construction contract provisions;
3. Adequate construction supervision is being provided to assure compliance with construction requirements and Florida Administrative Code Chapter 62-600 or Chapter 62-604, as appropriate;
4. Construction up to the point of this disbursement is in compliance with the approved plans and permits;
5. All changes, additions, or deletions to the construction contract(s) have been documented by change order and all change orders have been submitted to the Department; and
6. All additions or deletions to the Project which have altered the Project's performance standards, scope, or purpose (since issuance of the pertinent Department permit) have been identified in writing by amendment to this Agreement.

Engineer's Signature and Date

Engineer's Seal below: