AMENDMENT NO. 1

TO

PROGRESSIVE DESIGN-BUILD ION EXCHANGE RESIN PLANT AND EAST WATER TREATMENT PLANT IMPROVEMENTS

This Amendment No. 1 to the Progressive Design-Build Ion Exchange Resin Plant and East Water Treatment Plant Improvements Agreement dated July 2, 2014 between the City of Boynton Beach and CDM Constructors Inc.

OWNER:

(Name and address)

The City of Boynton Beach, Florida

100 E. Boynton Beach Boulevard

PO Box 310

Boynton Beach, FL 33425-0310

DESIGN-BUILDER:

(Name and address)

CDM Constructors Inc.

621 NW 53rd Street, Suite 265

Boca Raton, FL 33487

Per the Agreement, the Owner and Design-Builder will implement this project on a phased basis. Phase 1 included design, pricing, and other services. This Amendment No. 1 is to authorize the Phase 2 Scope of Services to include completion of design services, procurement of all materials and equipment, construction services, start-up, testing, and commissioning of the Project. The following modifications shall be incorporated into the Agreement:

Article 2.0 Contract Documents

2.1.3: Delete "Attachment F Owner's Project Criteria"

Insert "Attachment F Owner's Permit List"

Delete "Attachment G Owner's Permit List"

Insert "Attachment G Special Conditions"

Article 5.0 Contract Time

5.2.1 Insert "*Phase 2*" before the word "Commencement"

Attachment B Compensation (Revised)

Section 2.0 Guaranteed Maximum Price

Delete "28,868,230"

Insert "Phase 2 Services of \$24,871,354 after Owner Direct Purchases and Tax Savings"

Section 4.6 Contract Price

Insert "Twenty Four Million Eight Hundred Seventy One Thousand Three Hundred Fifty Four Dollars (\$24,871,354) after Owner Purchases and Tax Savings"

Attachment C Schedule (Revised) - Delete all and insert:

Insert "Project Schedule and Milestones" dated February 11, 2015

Attachment D General Conditions (Revised)

GC 2.0 Design-Builder's Services and Responsibilities

2.11 Performance Warranty

Delete reference to Attachment F, Owners Project Criteria.

Attachment F *Owner's Permit List* (Revised) - Delete all and insert:

Section 1

Insert "Owner's Permit List" dated February 11, 2015.

Attachment G Special Conditions (Revised)

31. Part 3 Interruptions:

Delete "In situations whereby Design-Build Firm deems it necessary to interrupt operations, only a twenty-four (24) hour downtime is permissible."

Insert "Interruptions to operations should be minimized and coordinated with prior approval of Owner."

Attachment I Phase 2 Scope Of Work (New)

Insert "Attachment I Phase 2 Scope of Work" dated February 11, 2	015.
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Except as hereby amended, change or modified, all other terms, conditions and obligations of the Codated July 2, 2014 will remain in force and effect.							

IN WITNESS WHEREO be considered an original o		ve executed this Contrac	ct in multiple copie	s, each of which shall
DATED this day of			, 20	
CITY OF BOYNTON BEA	АСН			
City Manager		tractor		
Attest/Authenticated:				
	Title			
		(Corporate Seal)		
City Clerk				
Approved as to Form: A	ttest/Authenticated:			
Office of the City Attorney	Secretar	ry		

ATTACHMENT C **SCHEDULE**

SECTION 1 PHASE 1 AND PHASE 2

Project Schedule and Milestones

Phase 1 Notice To Proceed

Thursday, July 10, 2014 Date of Commencement (NTP+5) Monday, July 14, 2014 Review Of Alternative Design/Value Engineering Wednesday, August 06, 2014 Design Definition Meeting Wednesday, August 20, 2014 **Design Development Documents** Sunday, January 11, 2015 **Submit Permitting Applications and Documents** Sunday, January 11, 2015 Negotiate / Finalize GMP Friday, February 13, 2015 March Board Meeting Monday, March 2, 2015 Thursday, March 5, 2015 Preconstruction Meeting Issue Owner Contract Monday, March 9, 2015

Friday, March 13, 2015

Monday, March 16, 2015

Phase 2 Notice To Proceed

Provide Bonds/Insurance

Execute Owner Agreement

Thursday, March 19, 2015 Date of Commencement (NTP+5)* Monday, March 23, 2015 Early Substantial Completion Bonus Date* Wednesday, July 13, 2016 Substantial Completion* Wednesday, August 3, 2016 Punchlist/Closeout* Monday, October 31, 2016 Project Final Completion (SC +90)* Friday, September 23, 2016 Warranty (2 Years from Final)* Saturday, September 22, 2018

ATTACHMENT F OWNER'S PERMIT LIST

SECTION 1

1.0 Owners Permit List

- 1.1 Phase 1 South Florida Water Management District Water Use Permit
- **1.2 Phase 2 None**

2.0 Design-Builders Permit List

2.1 Phase 1

- a. Palm Beach County Clerk Notice Of Commencement
- b. Palm Beach County Health Department Application for a Public Drinking Water Facility (Application Only)
- c. South Florida Water Management District Environmental Resource Permit (Application Only)

2.2 Phase 2

- a. City Of Boynton Beach Land Development- Minor Site Modification
- b. Florida Fish and Wildlife Conservation Commission Gopher Tortoise Relocation Permit
- c. City Of Boynton Beach Building Department Demolition Permit
- d. Palm Beach County Health Department (Demolition Notice)
- e. City Of Boynton Beach Building Permit (Master Permit)
- f. South Florida Water Management District NPDES NOI Stormwater Discharge from a Construction Site
- g. South Florida Water Management District Dewatering Permit
- h. Florida Department of Transportation (Right-Of Way Permit for Seacrest Blvd. Work)

ATTACHMENT I

PHASE TWO – FINAL DESIGN, PERMITTING, PROCUREMENT, CONSTRUCTION, AND STARTUP SERVICES

SCOPE OF WORK

ANIONIC EXCHANGE RESIN FACILITY AND EAST WATER TREATMENT PLANT IMPROVEMENTS

This Authorization, when executed, shall be incorporated in and become part of the Agreement for Design-Build Services between the City of Boynton Beach (OWNER), and CDM Constructors Inc. (DESIGN BUILD FIRM), dated July 1, 2014 hereafter referred to as the Agreement.

PROJECT BACKGROUND

The DESIGN BUILD FIRM will ultimately perform engineering design, surveying, geotechnical work, permitting, construction, installation and start-up support in the form of a two-phase Guaranteed Maximum Price (GMP) approach.

The Phase 1 Scope of Services involved design development and GMP development services. This Phase 2 Scope of Services involves final design and construction of a new anionic exchange resin facility for pre-treatment of Western Wellfield raw water supply to the East Water Treatment Plant (WTP) and the upgrading/capacity expansion of the existing lime softening and filtration systems at the East WTP to a capacity of 24 million gallons per day (mgd).

The scope will include the following treatment facilities improvements:

- Anionic Exchange Resin Treatment Facility (AERTF)
 - 1. Demolition of the existing eastern Lime Softening Basin and Fluoride Facilities at the East WTP. The new Miex contact basin will be constructed in the space made available by demolition of this softening basin.
 - 2. One (1) new AERTF designed for a capacity of 16 mgd. System will include two (2) anionic exchange resin contactor cells/tanks and a resin regeneration system. The proprietary anionic resin process system (MIEX®) components including contactor internal mechanisms, regeneration systems, and other supporting equipment will be supplied on a sole-source basis by ORICA Watercare.
 - 3. Modification of the existing electrical service and systems to accommodate the power requirements and instrumentation and controls systems to integrate the new MIEX® system.
 - 4. Miscellaneous piping connections to the Western Wellfield raw water supply lines at the WWTP. Miscellaneous connections to the incoming Western Wellfield raw water supply lines and the newly-built MIEX® Pretreatment System at the East WTP.

• East WTP Upgrade

- 1. Replacement of all of the motor-operated and pneumatically-operated filter valves with new motor-operated valves. With the exception of the filter inlet valves, all of the valves to be replaced are located in the two filter piping galleries.
- 2. Modifications to the clearwell for primary disinfection purposes. Structural repairs of the existing clearwell (up to allowance amounts included in the GMP or any additional funding levels approved by the City of Boynton Beach), replacement of two isolation valves and two sluice gates inside the existing clearwell, and addition of a weir wall within the center channel of existing clearwell. Relocation of the free chlorine addition point to the filter influent troughs and the ammonia feed point to downstream of the new outlet weir from the clearwell to the wetwell for the suction.
- 3. Replacement of seven existing high service pumps (and motors) with new energy-efficient pumps of the same make, model, and performance characteristics. Three of the pumps will be powered through new variable frequency drives (VFDs) and four will be powered through reduced voltage soft starters (RVSS).
- 4. Replacement of two existing 75-ton lime silos with two new 75-ton lime silos with a total storage of 15 days at a water treatment capacity of 24 mgd. Replacement of the existing lime slurry dilution boxes and lime slurry pumps.
- 5. Miscellaneous chemical system upgrades/ improvements to support the 24 mgd treatment capacity.
- 6. Addition of variable frequency drives to two existing washwater return pumps (note however that replacement of existing motors with new inverter duty-rated motors is not included in the GMP).
- 7. Miscellaneous demolition. Removal of steel framing on the existing second floor of the existing vacuum filter building and concrete patching of roof deck. Removal of the existing backwash pump. Demolition of the existing gravity thickener and restoration to grade. Demolition of onsite generation equipment and controls.
- 8. Modification of the electrical systems to accommodate the power requirements and instrumentation and controls systems to integrate the new MIEX® system and to accommodate the plant improvements and expansion while meeting the requirements of Chapter 62-555 FAC, at a minimum.
- 9. Upgrade of the instrumentation and control systems to accommodate the plant improvements and expansion.
- 10. Construction of a new Repump Station (three, 100-hp slab-on-grade pumps) and a 3.0 Million Gallon (MG) Ground Storage Tank (GST) with a 350-kW generator within the southern portion of the EWTP site.

- 11. Miscellaneous site, stormwater control, and yard piping improvements (raw water, finished water, and spent filter backwash), including accommodation of a 3.0MG Finished Water GST.
- 12. Miscellaneous modifications within both wings of the existing Control/Filter Building.

This information is further defined in our supporting documentation for the GMP and the Preliminary Design Report submitted to the Palm Beach County Health Department dated February 5, 2015.