City of Jacksonville, Florida

Lenny Curry, Mayor

ONE CITY. ONE JACKSONVILLE.

Department of Public Works
Solid Waste Division
1031 Superior Street
Jacksonville, FL 32254
(904) 255-7500
www.coj.net

10/25/18 11:19:32
Procurement Division

October 22, 2018

TO: **Greg Pease, Chief, Procurement Division**

THRU: **John Pappas, P.E., Director, Department of Public Works**

From: **Jeffrey S. Foster, P.G, SW Environmental Engineer Manager**
Will Williams, Chief, Solid Waste Division

SUBJECT: **CDM Smith, Inc. Amendment #15**
Trail Ridge Landfill Expansion Permitting and Design
Contract No. 6354-13, P-07-10
Account No. PWSW44K-069505-SW005-06

Amendment #15(A) is needed to fund the materials testing and engineering QA/QC oversight required for the construction contractor's (Glover) repair work resulting from Hurricane Hermine damage. Additionally, elevated levels of lead have caused delays while the contractor is implementing best management practices to deal with the lead issue. Amendment #15(B) includes activities to design Phase 7.

The Solid Waste Division is requesting approval of Amendment #15 (two parts A and B) for the Scope of Work contained in Exhibit AE (15A) and Exhibit AG (15B) to the contract in the amount of $337,316.00 as detailed in the Contract Fee Summary Exhibit AF and $506,077.00 for Exhibit AH. The current contract amount for the base contract and Amendments 1 through 14 is $9,699,647.00. Approval of Amendment #15 in the total amount of $843,393.00 will bring the maximum indebtedness to the City's not to exceed amount of $10,543,040.00. Nothing contained herein shall be amended, modified or otherwise revised without prior PSEC and Mayor's approval.

If there are any questions, please do not hesitate to contact me at this office (904) 381-8205. Please advise when this item will be placed on the agenda so a representative of DPW can attend.

JSF/jsf
Attachments

ab

EXHIBIT AE

AMENDMENT 15A TO TASK AUTHORIZATION 6354-13

FOR

TRAIL RIDGE LANDFILL CLASS I CELL EXPANSION PROJECT

ENGINEERING SERVICES DURING CONSTRUCTION
July 2018 Through September 2018

This Authorization, when executed, shall be incorporated in and become part of the Agreement for Professional Services between the City of Jacksonville (OWNER), and CDM Smith Inc. (CONSULTANT), dated February 9, 2011 hereafter referred to as the Agreement.

PROJECT BACKGROUND

CONSULTANT will assist the OWNER with the design, permitting, and construction of a new Class 1 landfill facility (Phases 6-14) at the Trail Ridge Landfill (TRLF) site. The existing landfill has been developed via 5 stages of cell construction (Phases 1-5) over 20 years and is within 2-3 years of reaching capacity. CONSULTANT has completed the following work related to the TRLF Class I Cell Expansion Project.

Initial Authorization – Developed a Master Plan for the build-out of the TRLF site. The Master Plan recommended three phases, Phases 6 through 8 (now numbered 6 through 14), for full site buildout and evaluated various options for the next cell construction, Phase 6 expansion. The initial authorization also initiated field data collection for design of the TRLF Expansion Project.

Amendment 1 – Developed permit application and supporting documentation for the TRLF Expansion Environmental Resource Permit (ERP).

Amendment 2 – Continued data collection and developed permitting plans and specifications for Phase 6A through 6E TRLF Expansion Florida Department of Environmental Protection (FDEP) Solid Waste Permit. Amendment 2 included conceptual stormwater modeling, development of methane gas management plan, geotechnical stability analysis, and ongoing hydro-geological modeling.

Amendment 3 – Authorized investigation of expansion of the on-site borrow pit for use in future landfill activities. This amendment was a partial authorization of the Amendment 3 activities at TRLF. The remaining activities were authorized under Amendment 4.

Amendment 4 – Authorized funding for the remaining work described and approved in Amendment 3, including continued design and permitting activities for Phases 6 through 14 with development of solid waste construction permit application and Phase 6 construction documents. This amendment also included bidding services.

Amendment 5 – This amendment is a continuation of the work begun under the previous four amendments to obtain the ERP and FDEP Solid Waste Construction Permits needed to construct Phases 6-14 of the Trail Ridge Landfill Expansion. This amendment included activities to apply for a major

Exhibit 'AE'

modification of the site's existing Prevention of Significant Deterioration (PSD) permit, renew the site's solid waste operating permit, and design a new access road for operational traffic. CONSULTANT submitted and received the FDEP solid waste construction permit, operations permit, and 2014 financial assurances for the planned expansion area under this amendment.

Amendment 6 – This amendment authorized Engineering Services During Construction to support the TRLF Phase 6 Expansion Project. The amendment included conforming contract documents, holding a pre-construction meeting, conducting shop drawing review, issuing designer clarifications, addressing requests for additional information, and providing resident project representation (RPR) for the project. These services were authorized through December 2015.

Amendment 7 – This amendment authorized design and permitting of a limerock construction access road from County Road 228 to Gilridge road. This road will provide access to the landfill and borrow areas for construction vehicles. This amendment also included intersection improvements to the perimeter road encircling Phases 1-5 of the existing landfill to facilitate re-routing of operations traffic to the new western access road. Re-routing of operations traffic is a key component of the construction sequence for the new Phase 6 cell.

Amendment 8 – This amendment authorized engineering services during construction for January 2016 through December 2016. Additionally, this scope includes activities to perform financial assurances reporting to FDEP associated with the site Solid Waste Permit, and perform various monitoring and maintenance tasks associated with onsite mitigation areas to maintain compliance with the site Environmental Resource Permit (ERP).

Amendment 9 - This amendment authorized engineering services during construction for January 2017 through July 2017. Additionally, this scope includes activities to perform various monitoring and maintenance tasks associated with onsite mitigation areas to maintain compliance with the site Environmental Resource Permit (ERP).

Amendment 10 – This amendment authorizes a seepage analysis study of the borrow pit south of Landfill Phases 1-5 to improve dewatering activities and address erosion concerns.

Amendment 11 - This amendment includes activities to perform investigation and recommendation for pretreatment of the landfill leachate prior to disposal at the Buckman WWTP, due to interference with the WWTP UV disinfection process.

Amendment 12 - This amendment extended geotechnical conformance testing from August 2017 through October 2017.

Amendment 13 – This amendment extended engineering services during construction through June 2018 due to an extension of the construction schedule by the Contractor.

Amendment 14 – This amendment authorized design and permitting of the Phase 6 gas collection system.

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SCOPE OF WORK

This scope of work for Amendment No. 15A is a continuation of the work begun under the previous amendments to design and construct the Phase 6 Trail Ridge Landfill Expansion. This amendment authorizes remaining engineering services during construction from July 2, 2018 through December 31, 2018 due to an extension of the construction schedule by the Contractor. If additional time is needed to complete construction, additional services during construction will be submitted as an additional amendment. The following is a description of the services to be provided under this Amendment No. 15A to the Task Authorization. The non-sequential order of some tasks and subtasks listed below is a result of tasks either being authorized under previous amendments or the work is to be authorized as part of future amendments.

TASK 1 - KICKOFF MEETING

There is no change to Task 1. All work has been completed for this task.

TASK 2 - DATA COLLECTION AND REVIEW

There is no change to Task 2. All work has been completed for this task.

TASK 3 - TRLF EXPANSION LANDFILL CELL ALTERNATIVES DEVELOPMENT

There is no change to Task 3. All work has been completed for this task.

TASK 4 - ANALYSIS OF PHASE 6 CELL ALTERNATIVE LOCATIONS

There is no change to Task 4. All work has been completed for this task.

TASK 5 - INITIATE FIELD SITE INVESTIGATION

There is no change to Task 5. All work has been completed for this task.

TASK 6 - STORMWATER MODELING

There is no change to Task 6. All work has been completed for this task.

TASK 7 - PROJECT MANAGEMENT

Task 7 is amended as follows:

CONSULTANT will perform project management duties for the additional tasks and time period described in Amendment No. 11. CONSULTANT will set up a project status report format, meetings schedule, schedule updates and other activities required as part of the management of this project.

TASK 8 - WETLAND LONG TERM HYDRATION EVALUATION

There is no change to Task 8. All work has been completed for this task.

TASK 9 - FLOOD ELEVATION DETERMINATION

There is no change to Task 9.

TASK 10 - ENVIRONMENTAL RESOURCE PERMITTING

There is no change to Task 10.

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TASK 11 - DESIGN AND PERMITTING

There is no change to Task 11.

TASK 12 - SOLID WASTE LANDFILL CONSTRUCTION PERMITTING

There is no change to Task 12. All work has been completed for this task.

TASK 13 - QUALITY ASSURANCE AND QUALITY CONTROL

There is no change to Task 13. All work has been completed for this task.

TASK 14 - ECONOMIC EVALUATION

There is no change to Task 14. All work has been completed for this task.

TASK 15 - PUBLIC INFORMATION PROGRAM ASSISTANCE

There is no change to Task 15. All work has been completed for this task.

TASK 16 - BIDDING SERVICES

There is no change to Task 16. All work has been completed for this task.

TASK 17 - GENERAL ENGINEERING SERVICES DURING CONSTRUCTION

Task 17 is amended to include the following tasks under this amendment

Subtask 17.1 - Pre-Construction Conference

This task is complete.

Subtask 17.2 - Monthly Progress Meetings

Monthly progress meetings will be held throughout the construction project. CONSULTANT shall schedule meetings, make physical arrangements for meetings, prepare and distribute the agenda, preside over the meeting, and prepare and distribute notes of the meetings. It is anticipated that up to seven monthly meetings will be held July 2018 through December 2018. CONSULTANT shall provide appropriate team members to attend the meeting. Discipline engineers will only be present at monthly meetings when needed as construction progresses.

Deliverable: Monthly Progress Meeting Agenda (4 – July 2018 through December 2018)

Subtask 17.3 - Review Shop Drawings, Samples, and Other Submittals

CONSULTANT will review and approve (or take appropriate action in respect of) sequence of work, stockpile plan, shop drawings, samples, operation and maintenance (O&M) manuals, schedule of values, payment application format, and other data (in accordance with Specifications) that CONTRACTOR is required to submit, but only for conformance with the information given in the contract documents and compatibility with the design concept of the completed project as a functioning whole as indicated in the Contract Documents. Such reviews and approvals or other action will not extend to means, methods, techniques, or procedures of construction or to safety precautions and programs incident thereto. CONSULTANT will review up to 10 original submittals and 1 resubmittal for each original submittal by the CONTRACTOR. Additional subsequent review by CONSULTANT of resubmittals is eligible

Exh 'AE'

for additional compensation. Review of Independent Testing Lab Results is covered separately in Subtask 17.4. For budgeting purposes, up to 5 shop drawings received during the period July 2018 through December 2018 are authorized at this time.

Subtask 17.4 - Review of Independent Testing Lab Results

CONSULTANT will contract with a geotechnical and materials testing laboratory to conduct independent testing of CONTRACTOR's work. CONTRACTOR shall contact the testing laboratory to conduct the testing as needed throughout construction progress. CONSULTANT shall witness field testing through the use of the Resident Project Representative (RPR). CONSULTANT reserves the right to request additional compensation, should the CONTRACTOR complete the testing outside of the standard 40-hour work week for the RPR.

CONSULTANT is responsible for all testing costs, including analysis and shipping (if needed). CONSULTANT to review test results for conformance with Contract Documents.

The tests outlined in **Table 1** are anticipated for the TRLF project. For budgeting purposes testing labor and analysis will be carried on a not-to-exceed basis.

CONSULTANT will review field test reports for conformance with project contract documents. Should CONTRACTOR fail to pass the independent test and retesting is required, the CONSULTANT is eligible for additional compensation to review retest results. For budgeting purposes, only field staff for testing associated with work from July 2018 through December 2018.

Subtask 17.5 - Evaluation of Substitutes

CONSULTANT shall evaluate and determine the acceptability of substitutes and "or-equal" materials and equipment proposed by CONTRACTOR. Revisions to Drawings and Specifications as a result of acceptance of substitute materials or equipment (other than "or-equal" items) or evaluation of an excessive number of substitutes will only be performed pursuant to an amendment to this Agreement for additional compensation. The CONSULTANT shall notify the OWNER of the CONTRACTOR's intent for any material substitutions prior to CONSULTANTS review.

Subtask 17.6 - Site Visits and Observation of Construction Progress

CONSULTANT will make visits to the site at intervals appropriate to the various stages of construction to observe the progress and quality of the executed work of the Contractor and to determine in general if such work is proceeding in accordance with the Contract Documents. During such visits and on the basis of on-site observations, CONSULTANT shall keep OWNER informed of the progress of the work and shall endeavor to determine in general if such work is proceeding in accordance with the Contract Documents. Additionally, during such visits and on the basis of such observations, CONSULTANT shall disapprove or reject Contractor's work while it is in progress if CONSULTANT believes that such work will not produce a completed Project that conforms generally to the Contract Documents or that it will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents. CONSULTANT shall document the site visits with an e-mail to the CONSULTANT's and OWNER's Project Managers summarizing the observations, discussions and/or decisions.

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In addition to the above-detailed site visits, CONSULTANT shall provide the services of an RPR at the site to assist CONSULTANT and to provide more continuous observations of such work. These services are detailed in Task 18.0. For budgeting purposes, one site visit per month is planned July 2018 through December 2018 are authorized at this time.

Subtask 17.7 - Clarifications, Interpretations, and Field Orders

CONSULTANT shall issue necessary clarifications and interpretations on technical matters of the Contract Documents as appropriate to the orderly completion of the work. Such clarifications and interpretations will be consistent with the intent of and reasonably inferable from the Contract Documents. CONSULTANT may issue Field Orders authorizing minor variations from the requirements of the Contract Documents. CONSULTANT will provide up to ten clarifications. For budgeting purposes, only clarifications from July 2018 through December 2018 are authorized at this time. A separate amendment will be submitted for clarifications for subsequent sequences.

Subtask 17.8 - Change Orders

No change to subtask 17.8.

Subtask 17.9 - Review of Applications for Payment

Based on CONSULTANT's on-site observations as an experienced and qualified design professional and on review of Applications for Payment and the accompanying data and schedules, CONSULTANT will prepare and submit to OWNER a recommendation for payment in the form of a letter. Approval of invoices will be by OWNER. For budgeting purposes, it is assumed that 4 total Applications for Payment will be processed during the period of July 2018 through December 2018.

Subtask 17.10 - Substantial Completion

No change to subtask 17.10.

Subtask 17.11 - Final Inspection

No change to subtask 17.11

Subtask 17.12 - Review of Contractor's Completion Documents

No change to subtask 17.12.

Subtask 17.13 - Preparation of Record Drawings

No change to subtask 17.13.

Subtask 17.14 - Preparation and Submittal of Final Certification Report

No change to subtask 17.14.

Subtask 17.15 - Permit Close-out (All other permits)

No change to subtask 17.15.

Subtask 17.16 - Submittal of Complete Project Documents to Owner

No change to subtask 17.16.

Exb 'AE'

Subtask 17.17 - General Administration of Construction Contract

CONSULTANT shall consult with and advise OWNER and act as OWNER's representative as provided in the Standard General Conditions. The extent and limitations of the duties, responsibilities and authority of CONSULTANT as assigned in said Standard General Conditions shall not be modified. All of OWNER's instructions to Contractor will be issued through CONSULTANT who shall have authority to act on behalf of OWNER in dealings with CONTRACTOR to the extent provided in this Agreement and said Standard General Conditions. Under this task, CONSULTANT may issue communications to the CONTRACTOR addressing clarifications and/or interpretations pertaining to administrative matters covered in the Standard General Conditions, addressing correction or acceptance of defective work, monitoring compliance with contract requirements for notification and coordination with OWNER's operations and other contractors, etc. For budgeting purposes, only activities from July 2018 through December 2018 are authorized at this time. A separate amendment will be submitted for general administration activities in subsequent years.

TASK 18 - SPECIAL SERVICES

No change to this task

TASK 19 - RESIDENT PROJECT REPRESENTATIVE SERVICES DURING CONSTRUCTION

Task 19 is amended to include the following tasks under this amendment:

CONSULTANT will provide full-time RPR services during the active project construction period to observe the performance of the Contractor's work.

The level of work estimated for the period of July 2018 through December 2018 is 800 labor-hours of RPR time (4 months * 4 weeks/month * 50 hours/week). CONSULTANT reserves the right to request additional compensation, should construction extend beyond the hours budgeted in this proposal.

CONSULTANT's RPR will act as directed by and under the supervision of CONSULTANT and will confer with CONSULTANT regarding his/her actions. The RPR's dealings in matters regarding the on-site work shall in general be only with CONSULTANT and the CONTRACTOR, and dealings with subcontractors shall only be through or with the full knowledge of the CONTRACTOR. Written communication with OWNER will be only through or as directed by CONSULTANT.

CONSULTANT's RPR will prepare daily reports describing the general working conditions, areas of construction activity, types of construction activities, tests performed, and special and unusual events. Daily reports will be provided to OWNER. The RPR will be responsible for implementation of the CQA Manual and coordination of the Quality Assurance Laboratory. The RPR will also be responsible for providing input and documentation to the EOR for preparing a final sealed certification report that will be submitted to the appropriate permitting agency. The RPR shall record all field activities on the appropriate forms.

TASK 20 - NEW CELL GEOSYNTHETIC INSTALLATION QA/QC CONSTRUCTION SERVICES

No change to this task.

TASK 21 - BORROW PIT EVALUATION AND EXPANSION

No change to this task.

EKB AE

TASK 22 - MEETINGS, PROJECT MANAGEMENT AND QUALITY CONTROL

No changes to this task.

ASSUMPTIONS

The following assumptions are included in this Amendment No. 15A:

1. OWNER shall be responsible for all permit or review fees associated with project.
2. OWNER shall bear all costs incident to compliance with the requirements of the OWNER's Responsibilities.
3. All work described in this amendment is for July 2018 through December 2018. Engineering Services During Construction for subsequent sequences will be included in future amendments.
4. For budgeting purposes, it is assumed that 5 submittals will be processed.
5. For budgeting purposes, it is assumed that 5 clarifications will be issued.
6. For budgeting purposes, it is assumed that 4 Applications for Payment will be processed.
7. If construction extends beyond December 2018, an additional amendment will be necessary.

DELIVERABLES

The following deliverables will be provided:

Task	Description of Deliverable	Quantity/Format
Clarifications and Interpretations; Field Orders	Up to 5 clarifications	- Electronic format
Review of Applications for Payment	Cover letter and 4 Applications for Payment	- One Hard Copy and two electronic copies
Resident Project Representative (RPR) Services	Daily reports describing construction activities to be submitted to the OWNER on a weekly basis	- Electronic format
Project and Quality Management	Monthly status reports	- Electronic format

TIME OF COMPLETION/SCHEDULE

CONSULTANT will begin work within 5 calendar days of receiving Notice to Proceed (NTP) from the OWNER. Engineering Services During Construction will be provided based on the CONTRACTOR's approved construction schedule. All authorized work will take place by December 31, 2018.

EXB 'AE'

COMPENSATION AND PAYMENT

CONSULTANT will complete the services in the Tasks listed above in this Amendment No. 15A, excluding quality assurance and conformance testing, for a lump sum fee of **$181,316** as shown in Exhibit AF. CONSULTANT will invoice monthly as a percentage of the lump sum based on the percentage of work completed during the billing period. Lump sum compensation shall be for all labor, sub-consultants, and other direct costs associated with the performance of the work. CONSULTANT will complete quality assurance and conformance testing for a not to exceed cost of **$156,000** as shown in Exhibit AF. CONSULTANT will invoice monthly based on actual testing completed. The new total amended value for this Task Authorization is **$10,036,963.**

EXb 'AE'

EXHIBIT AF

CONTRACT FEE SUMMARY FORMAT FOR ENGINEERING DIVISION

CITY OF JACKSONVILLE, FLORIDA

CLASS I LANDFILL PERMITTING AND DESIGN - AMENDMENT 15A

7/1/2018

PART I - GENERAL				
1. Project			**Proposal Number**	
CLASS I LANDFILL PERMITTING AND DESIGN AMENDMENT #15A Engineering Services During Construction			RFP #P-07-10	
3. Name of Consultant			**Date of Proposal**	
CDM Smith Inc.			7/1/2018	
PART II - LABOR RELATED COSTS				
5. Direct Labor	Hourly Rate	Estimated Hours		TOTAL
Officer/Technical Expert	74.32	72	$ 5,351.04	
Principal / Associate / Project Manager	63.06	201	$ 12,675.06	
Senior Profesional	50.11	130	$ 6,514.30	
Project Engineer II / GIS Speicalist III	41.10	66	$ 2,712.60	
Project Engineer I / GIS Specialist II	34.34	10	$ 343.40	
Sr. GIS Specialist/Designer	40.54	-	$ -	
GIS Specialist I /Drafter/Technician	29.28	20	$ 585.60	
Clerical	20.83	147	$ 3,062.01	
Field Staff Support Services	28.15	1,200	$ 33,780.00	
TOTAL DIRECT LABOR	35.22	1,846		$ 65,024
6. Overhead (Combined Fringe Benefit & Administrative)				
Overhead Rate	150.0%	x Total Direct Labor		$ 97,536
7. SUBTOTAL: Labor + Overhead (Items 5 & 6)				$ 162,560
8. PROFIT: Labor Related Costs (Item 7)		x	10%	$ 16,256
PART III - OTHER COSTS				
9. Miscellaneous Direct Costs				
Transportation, Per Diem and Equipment				
Presentation Boards				
Reproduction				
MISCELLANEOUS DIRECT COSTS SUB-TOTAL				$ 2,500
10. SUBCONTRACTS (Lump Sum)				
				$ -
SUB-CONTRACT SUB-TOTAL				$ -
TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10)				$ 181,316
11. REIMBURSABLE COSTS (Limiting Amount)				
Quality Assurance Testing (Ph6 Expansion)			$ 156,000	
SUB-TOTAL REIMBURSABLES				$ 156,000
PART IV - SUMMARY				
TOTAL AMOUNT OF AM 15A CONTRACT (Lump Sum Plus Reimbursables)				**$ 337,316**
12. PRIOR CONTRACT AMOUNT (Through Amendment 14)				$ 9,699,647
AMENDED AMOUNT OF CONTRACT				$ 10,036,963

Exhibit 'AF'

EXHIBIT AG

AMENDMENT 15B TO TASK AUTHORIZATION 6354-13

FOR

TRAIL RIDGE LANDFILL CLASS I CELL EXPANSION PROJECT

PHASE 7 DESIGN AND PERMITTING

This Authorization, when executed, shall be incorporated in and become part of the Agreement for Professional Services between the City of Jacksonville (OWNER), and CDM Smith Inc. (CONSULTANT), dated February 9, 2011 hereafter referred to as the Agreement.

PROJECT BACKGROUND

CONSULTANT will assist the OWNER with the design, permitting, bidding and construction of a new Class 1 landfill facility (Phases 6-14) at the Trail Ridge Landfill (TRLF) site. The existing landfill has been developed via 5 stages of cell construction (Phases 1-5) over 20 years and is within 2-3 years of reaching capacity. CONSULTANT has completed the following work related to the TRLF Class I Cell Expansion Project.

Initial Authorization – Developed a Master Plan for the build out of the TRLF site. The Master Plan recommended three phases, Phases 6 through 8 (now numbered 6 through 14), for full site buildout and evaluated various options for the next cell construction, Phase 6 expansion. The initial authorization also initiated field data collection for design of the TRLF Expansion Project.

Amendment 1 – Developed permit application and supporting documentation for the TRLF Expansion Environmental Resource Permit (ERP).

Amendment 2 – Continued data collection and developed permitting plans and specifications for Phase 6A through 6E TRLF Expansion Florida Department of Environmental Protection (FDEP) Solid Waste Permit. Amendment 2 included conceptual stormwater modeling, development of methane gas management plan, geotechnical stability analysis, and ongoing hydro-geological modeling.

Amendment 3 – Authorized investigation of expansion of the on-site borrow pit for use in future landfill activities. This amendment was a partial authorization of the Amendment 3 activities at TRLF. The remaining activities were authorized under Amendment 4.

Amendment 4 – Authorized funding for the remaining work described and approved in Amendment 3, including continued design and permitting activities for Phases 6 through 14 with development of solid waste construction permit application and Phase 6 construction documents. This amendment also included bidding services.

Amendment 5 – this amendment is a continuation of the work begun under the previous four amendments to obtain the ERP and FDEP Solid Waste Construction Permits needed to construct Phases 6-14 of the Trail Ridge Landfill Expansion. This amendment included activities to apply for a major modification of the site's existing Prevention of Significant Deterioration (PSD) permit, renew the site's

Exhibit 'AG'

solid waste operating permit, and design a new access road for operational traffic. CONSULTANT submitted and received the FDEP solid waste construction permit, operations permit, and 2014 financial assurances for the planned expansion area under this amendment.

Amendment 6 – this amendment authorized Engineering Services During Construction to support the TRLF Phase 6 Expansion Project. The amendment included conforming contract documents, holding a pre-construction meeting, conducting shop drawing review, issuing designer clarifications, addressing requests for additional information and providing resident project representation (RPR) for the project. These services were authorized through December 2015.

Amendment 7 – this amendment authorized design and permitting of a limerock construction access road from County Road 228 to Gilridge road. This road will provide access to the landfill and borrow areas for construction vehicles. This amendment also included intersection improvements to the perimeter road encircling Phases 1-5 of the existing landfill to facilitate re-routing of operations traffic to the new western access road. Re-routing of operations traffic is a key component of the construction sequence for the new Phase 6 cell.

Amendment 8 – this amendment authorized engineering services during construction for January 2016 through December 2016. Additionally, this scope includes activities to perform financial assurances reporting to the Florida Department of Environmental Protection (FDEP) associated with the site Solid Waste Permit, and perform various monitoring and maintenance tasks associated with onsite mitigation areas to maintain compliance with the site Environmental Resource Permit (ERP).

Amendment 9 - this amendment authorized engineering services during construction for January 2017 through June 2017. Additionally, this scope includes activities to perform various monitoring and maintenance tasks associated with onsite mitigation areas to maintain compliance with the site Environmental Resource Permit (ERP).

Amendment 10 – this amendment authorizes a seepage analysis study of the borrow pit south of Landfill Phases 1-5 to improve dewatering activities and address erosion concerns.

Amendment 11 - this amendment includes activities to perform investigation and recommendation for pretreatment of the landfill leachate prior to disposal at the Buckman WWTP, due to interference with the WWTP UV disinfection process.

Amendment 12 - this amendment extended geotechnical conformance testing from August 2017 through October 2017.

Amendment 13 – this amendment extended engineering services during construction through June 2018 due to an extension of the construction schedule by the Contractor.

Amendment 14 – this amendment authorized design and permitting of the Phase 6 gas collection system.

Exhibit 'AG'

SCOPE OF WORK

This scope of work for Amendment 15B is a continuation of the work begun under the previous amendments to support the active Trail Ridge Landfill. This scope includes activities to design and permit Phase 7, a new 31-acre lined cell for Class I waste. The following is a description of the services to be provided under this Amendment No. 15B to the Task Authorization. The non-sequential order of some tasks and subtasks listed below is a result of tasks either being authorized under previous amendments or the work is to be authorized as part of future amendments.

TASK 1 - KICKOFF MEETING

There is no change to Task 1. All work has been completed for this task.

TASK 2 - DATA COLLECTION AND REVIEW

There is no change to Task 2. All work has been completed for this task.

TASK 3 - TRLF EXPANSION LANDFILL CELL ALTERNATIVES DEVELOPMENT

There is no change to Task 3. All work has been completed for this task.

TASK 4 - ANALYSIS OF PHASE 6 CELL ALTERNATIVE LOCATIONS

There is no change to Task 4. All work has been completed for this task.

TASK 5 - INITIATE FIELD SITE INVESTIGATION

There is no change to Task 5. All work has been completed for this task.

TASK 6 - STORMWATER MODELING

There is no change to Task 6. All work has been completed for this task.

TASK 7 - PROJECT MANAGEMENT

There is no change to Task 7.

TASK 8 - WETLAND LONG TERM HYDRATION EVALUATION

There is no change to Task 8. All work has been completed for this task.

TASK 9 - FLOOD ELEVATION DETERMINATION

There is no change to Task 9.

TASK 10 - ENVIRONMENTAL RESOURCE PERMITTING

There is no change to Task 10.

TASK 11 - DESIGN AND PERMITTING

There is no change to Task 11.

Exhibit 'AG'

TASK 12 - SOLID WASTE LANDFILL CONSTRUCTION PERMITTING

Task 12 is amended to include the following tasks:

Subtask 12.7 DESIGN OF CLASS I LANDFILL PHASE 7

This task includes development of contract plans and specifications for the TRLF Phase 7 Class I Cell.

Subtask 12.7.1 90 Percent Design

CONSULTANT will use the approved permit drawings for Phases 6-14 and the as-built information for the Phase 6 construction as the basis for developing detailed design drawings for Phase 7 Class I Cell Expansion. CONSULTANT will conduct a kickoff meeting with the OWNER to review the permitted basis of design and summarize the major design components for the 90 percent design deliverables.

CONSULTANT will prepare 90 percent specifications, including completed Division I and II forms using the OWNERS's specifications format. Where CONSULTANT recommends modifications, deletions, or additions to the OWNER's general conditions or standard specifications, notation will be made in Division IV, Section 31 Special Conditions using the OWNER's specifications format. Additional technical specifications will be presented in Division V using the CONSULTANT'S 50 Division format. Based on the design of Phase 6, it is anticipated that up to 40 technical specifications will be prepared for this project.

CONSULTANT will provide OWNER with a PDF as well as 4 hard copies of half-size (12-inch x 18-inch) 90 percent Contract Drawings for their review and consideration. CONSULTANT will perform an internal technical specialist review of the 90 percent documents and will meet with OWNER to review the 90 percent design drawings and specifications and discuss comments. Revisions will be incorporated as necessary to address technical specialist and OWNER comments. The drawing estimated sheet count associated with this task is listed below.

Description	No. Sheets
General Sheets	4
Existing Site Survey	1
Horizontal Control Plan and Tables	2
Removal, Abandonment and Demolition Plan	1
Cell Grading Plans	5
Landfill Sections	4
Leachate Collection Plan and Details	6
Civil Details	4
Erosion and Sediment Control Details	4
Stormwater Pollution Prevention Plan	2

Exhibit 'AG'

Subtask 12.7.2 - Final Design (BID Set)
CONSULTANT will incorporate mutually agreed upon OWNER comments from the 90 percent design review into the drawings and specifications and prepare the 100 percent (Bid Set) drawings and specifications. CONSULTANT will perform a comprehensive final design quality technical review. CONSULTANT will provide a PDF of the design drawings and specifications as well as four hard copies of half-size (12-inch x 18-inch) final design drawings and one 24-inch x 36-inch set of full-size design drawings.

As described in the previous task, CONSULTANT will revise the OWNER's front end documents and bid and contracting forms as applicable and in coordination with the solid waste design drawings and specifications being provided for Phase 7 Class I Cell Expansion.

Subtask 12.7.3 - Estimate of Probable Construction Cost
CONSULTANT will prepare an estimate of probable construction cost based on bidding documents. The estimate will be based on quantities of materials as shown on the plans, and unit prices from equipment vendors or recent project bid tabulations. The cost estimate will be developed in spreadsheet format and provided to the OWNER.

TASK 13 - QUALITY ASSURANCE AND QUALITY CONTROL

There is no change to Task 13. All work has been completed for this task.

TASK 14 - ECONOMIC EVALUATION

There is no change to Task 14. All work has been completed for this task.

TASK 15 - PUBLIC INFORMATION PROGRAM ASSISTANCE

There is no change to Task 15. All work has been completed for this task.

TASK 16 - BIDDING SERVICES

Task 16 has been amended to include the following tasks:

Subtask 16.7 Bidding Support for Class I Landfill Phase 7

The following subtasks outline the work to be performed to provide bidding services for the TRLF Expansion Phase 7.

Subtask 16.7.1 Bidding Support and Addenda
CONSULTANT will assist with the advertisement of the bid, address questions on bid documents forwarded by the OWNER, attend a pre-bid conference, and issue up to two addenda, as necessary. The OWNER will advertise for bids, supply drawings and specifications to contractors, and coordinate addenda distribution. The OWNER will be responsible for the cost of copying the plans and specification that are made available to prospective bidders.

Subtask 16.7.2 Evaluation of Bidders
CONSULTANT will attend the bid opening, evaluate bids based on references, pricing, and scope of services, and recommend a bidder to the OWNER for award of construction contract.

Exhibit 'A'

Subtask 16.7.3 Conformed Documents

After issuance of a Notice of Award by the OWNER, CONSULTANT shall assist the OWNER in preparing the construction contract, request and review the bid package provided by the Contractor and advise the OWNER on finalizing the contract.

CONSULTANT will conform the drawings and specifications based on the issued addenda. Conformed drawings will be provided in pdf format and AutoDesk Civil 3D 2017 DWG format to the successful bidder awarded the contract. One hard copy will be provided to the OWNER and two hard copies will be provided to the successful bidder. Each set of hard copies will consist on one full size set of drawings, one half size set of drawings and one specifications book.

TASK 17 - GENERAL ENGINEERING SERVICES DURING CONSTRUCTION

There is no change to Task 17.

TASK 18 - SPECIAL SERVICES

There is no change to Task 18.

TASK 19 - RESIDENT PROJECT REPRESENTATIVE SERVICES DURING CONSTRUCTION

There is no change to Task 19.

TASK 20 - NEW CELL GEOSYNTHETIC INSTALLATION QA/QC CONSTRUCTION SERVICES

There is no change to Task 20.

TASK 21 - BORROW PIT EVALUATION AND EXPANSION

There is no change to these subtasks.

TASK 22 - MEETINGS, PROJECT MANAGEMENT AND QUALITY CONTROL

There is no change to Task 22.

ASSUMPTIONS

The following assumptions are included in this Amendment:

1. OWNER shall bear all costs incident to compliance with the requirements of the OWNER's Responsibilities.

2. Phase 7 existing site survey will utilize Phase 6 Expansion as-built survey. If additional survey is required, a separate amendment will be required.

3. No permitting is anticipated to be required to construction Phase 7. If additional permitting requirements are identified, the CONSULTANT reserves the right to seek additional compensation.

4. CONSULTANT has based this proposal upon utilization of previously permitted design documents prepared by CDM Smith, dated February 2014. In the event that the CONSULTANT is

Exhibit 'A'

unable to utilize these documents, CONSULTANT reserves the right to request additional compensation in order to obtain and or complete the required scope of services.

5. CONSULTANT reserves the right to seek additional compensation for work performed beyond what is described in this Work Order.

6. Engineering services during construction will be performed under a separate amendment.

TIME OF COMPLETION/SCHEDULE

CONSULTANT will begin work October 1, 2018 and will continue through December 31, 2019.

COMPENSATION AND PAYMENT

CONSULTANT will complete the services in the Tasks listed above in this Amendment No. 15B for a lump sum fee of **$506,077** as shown in Exhibit AH. CONSULTANT will invoice monthly as a percentage of the lump sum based on the percentage of work completed during the billing period. Lump sum compensation shall be for all labor, sub-consultants, and other direct costs associated with the performance of the work. The new total amended value for this Task Authorization is **$10,542,953**.

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EXHIBIT AH

CONTRACT FEE SUMMARY FORMAT FOR ENGINEERING DIVISION

CITY OF JACKSONVILLE, FLORIDA

CLASS I LANDFILL PERMITTING AND DESIGN - AMENDMENT 15B

8/15/2018

PART I - GENERAL				
1. Project			**Proposal Number**	
CLASS I LANDFILL PERMITTING AND DESIGN AMENDMENT #15B Phase 7 Class I Cell Design and Permitting			RFP #P-07-10	
3. Name of Consultant			**Date of Proposal**	
CDM Smith Inc.			8/15/2018	
PART II - LABOR RELATED COSTS				
5. Direct Labor	Hourly Rate	Estimated Hours		TOTAL
Officer/Technical Expert	74.32	189		$ 14,046.48
Principal / Associate / Project Manager	63.06	394		$ 24,845.64
Senior Profesional	50.11	416		$ 20,845.76
Project Engineer II / GIS Speicalist III	41.10	808		$ 33,208.80
Project Engineer I / GIS Specialist II	34.34	1,184		$ 40,658.56
Sr. GIS Specialist/Designer	40.54	0		$ -
GIS Specialist I /Drafter/Technician	29.28	1,411		$ 41,314.08
Clerical	20.83	350		$ 7,290.50
Field Staff Support Services	28.15	0		$ -
TOTAL DIRECT LABOR				$ 182,210
6. Overhead (Combined Fringe Benefit & Administrative)				
Overhead Rate	150.0%	x Total Direct Labor		$ 273,315
7. SUBTOTAL: Labor + Overhead (Items 5 & 6)				$ 455,525
8. PROFIT: Labor Related Costs (Item 7)		x	10%	$ 45,552
PART III - OTHER COSTS				
9. Miscellaneous Direct Costs				
Transportation, Per Diem and Equipment				
Presentation Boards				
Reproduction				
MISCELLANEOUS DIRECT COSTS SUB-TOTAL				$ 5,000
10. SUBCONTRACTS (Lump Sum)				
SUB-CONTRACT SUB-TOTAL				$ -
TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10)				$ 506,077
11. REIMBURSABLE COSTS (Limiting Amount)				
SUB-TOTAL REIMBURSABLES				$ -
PART IV - SUMMARY				
TOTAL AMOUNT OF AM 15B CONTRACT (Lump Sum Plus Reimbursables)				$ **506,077**
12. PRIOR CONTRACT AMOUNT (Through Amendment 15A)				$ 10,036,963
AMENDED AMOUNT OF CONTRACT				$ 10,543,040

Exhibit 'AH'