#### TASK ORDER 6-12 FAC

#### ENGINEERING SERVICES FOR THE CONDITION ASSESSMENT OF THE GLYNN ARCHER FACILITY

This TASK ORDER 6-12 FAC is issued under the terms and conditions of the MASTER AGREEMENT TO FURNISH GENERAL ENGINEERING SERVICES TO THE CITY OF KEY WEST ("AGREEMENT") between the City of Key West ("CITY") and CH2M HILL Engineers, Inc. ("ENGINEER") executed on September 18, 2007, which is incorporated herein by this reference.

#### A. <u>SCOPE OF SERVICES</u>

Specific services which the ENGINEER agrees to furnish are summarized on the attached statement entitled TASK ORDER 6-12 FAC "SCOPE OF SERVICES." The "Scope of Services" defines the work effort anticipated for the Work Order.

This Work Order, when executed, shall be incorporated in and shall become an integral part of the September 18, 2007, Master Agreement.

#### B. <u>TIME OF COMPLETION</u>

Work under this Task Order will begin immediately following acceptance and completed expeditiously subject to coordination with the City of Key West staff. Work may be performed at any time as requested by the CITY within 12 months after the date of execution of this Task Order, at which time the Task Order will expire.

#### C. <u>COMPENSATION</u>

Compensation for the labor portion of TASK ORDER 6-12 FAC, Task A and B will be on a lump sum fee basis as stipulated in Article 2, Paragraph 2.1 of the AGREEMENT. Compensation for all expenses will be on a Cost Reimbursable-Per Diem basis as stipulated in Article 2, Paragraph 2.2 of the AGREEMENT. The estimated compensation is shown on the attached statement entitled TASK ORDER 6-12 FAC COMPENSATION.

#### D. <u>ACCEPTANCE</u>

By signature, the parties each accept the provisions of this TASK ORDER 6-12 FAC, and authorize the ENGINEER to proceed at the direction of the CITY's representative in accordance with the "SCOPE OF SERVICES." Start date for this project will be no later than ten (10) days after execution of this authorization.

For CITY OF KEY WEST				
By: Jim Scholl City Manager				
Dated the day of, 2012				
ATTEST:				

# TASK ORDER 6-12 FAC

### ENGINEERING SERVICES FOR THE CONDITION ASSESSMENT OF THE GLYNN ARCHER SCHOOL FACILITY

# **SCOPE OF SERVICES**

# **Project Description**

The CITY is currently negotiating the feasibility of accepting all, or portions of, the Glynn Archer school facility from the Monroe County School District (MCSD). If feasible, the City could utilize the proposed facilities to construct a new City Hall and staff offices. Due to the age of the existing school, the City has concerns with the potential environmental and structural issues as well as the ability (and cost) of bringing the building(s) up to current Florida Building Codes.

# Purpose

The CITY has requested that the ENGINEER provide engineering assistance with the preparation of a condition assessment of the existing school. This assessment will require significant testing (some destructive) to identify potential environmental issues such as Asbestos, Lead Based Paint, Mold and mildew in addition to concrete core sampling, structural, HVAC, geotechnical, plumbing, and electrical.

The CITY previously approved Work Order D-12 FAC is to provide for preliminary inspections by the engineers to see the facility and determine the extent of work that will be required to properly define the scope of work and identify testing sub-contractors work items for the condition assessment.

This Task Order 6-12 FAC is to provide the City with a complete condition assessment of the existing Glynn Archer facility. The condition assessment will address the following items:

- Structural Integrity
- Architectural Issues
- Environmental Assessments
- Building Services Issues
- Electrical Issues
- Geotechnical

The inspection, testing and condition assessment of the Glynn Archer School facility will include: Building A, Auditorium, and Building B.

# **Scope of Services**

The following tasks describe the activities to be performed and the Condition Assessment to be prepared by the ENGINEER.

## Task A - On-Site Testing and Evaluations

The ENGINEER's inspection team will include environmental, structural, architectural, electrical, and mechanical personnel. The inspection team along with contracted services of responsive, responsible professional sub-consultant(s) will provide on-site evaluations, inspections and testing of the existing Glynn Archer school facility. Based on the data obtained the inspection team will prepare a Condition Assessment Report.

## Task A.1 - Structural

The structural testing and evaluation will include the following:

- The structural team will need to obtain sufficient information on each building to perform a structural analysis. The information will be obtained by the following:
  - CH2M HILL will retain the services of a licensed and insured general contractor and roofer to complete the removal and repairs to the existing building.
  - Sheathing Investigation: Remove 6'-0" by 6'-0" area of existing roof membrane and roof roofing material down to the top of sheathing. The top of sheeting must be exposed and clear of debris (Approximately 14 locations).
  - Access Holes: 24" by 24" access holes to be cut in the existing ceiling and first floor to expose the existing floor and roof structure (Beams and Joists) members (Approximately 90 locations).
  - Concrete Wall: Concrete core samples (3 3/4" diameter) to be taken for compressive strength, chloride content and determine reinforcement in the concrete wall. Samples to be taken at 2 to 3 feet above top of window opening (Approximately 10 locations).
  - Wall Openings: Expose bottom of wall by cutting 12" by 16" opening and expose top of wall above the drop ceiling by cutting 12" by 16" opening (Approximately 80 locations).
  - Floor Openings: Provide access to the foundation by providing 24" by 24" minimum openings in the first floor (Approximately 14 locations).
- The building structural information obtained on member sizes, locations and connections will be used to perform a structural analysis of the buildings and suggestions for retrofitting the building to meet 2010 Florida Building Code and hurricane requirements. The results of the structural analysis will be used to determine if the existing structure has sufficient structural capacity for use as City Hall. Engineer will work with the City to obtain any available information on the buildings.

A \$67,500 budget allowance has been included in this subtask for selected removal and repair of the existing roof, floor and walls, as well as any required permitting.

The Engineer will obtain quotes from 3 local roofing contractors and local general contractors (if available) prior to entering into an agreement for the work.

## Task A.2 – Architectural

The Architectural testing and evaluation will include the following:

- Foundation
- Floor Systems
- Exterior Walls/Windows
- Roof System
- Insulation
- ADA Compliance
- Code Compliance
- Life safety component
- Adaptive Reuse assessment

Destructive test methods will be performed to determine the assembly and condition of the buildings' exterior envelope and interior components.

Core samples of the roof systems will be taken to identify membrane, insulation and type of decking. Portions of the interior ceilings will be removed to observe the underside of the decking. Portions of the interior walls will be removed to determine insulation type and wall components. Samples of each system will be tested to determine if they contain hazardous materials. The openings described in the structural task will be used for the architectural assessment.

## Task A.3 - Environmental

The Environmental testing and evaluation will include the following:

- Environmental inspection and testing will focus on determining the location and extent of materials containing asbestos, lead-based paint and/or mold contamination; (in accessible areas of Bldg A, B, and Auditorium)
- CH2M HILL will retain the services of EE&G, a certified industrial hygiene consulting firm. A Senior HUD-certified EE&G Lead inspector, three senior EE&G asbestos inspectors and a senior EE&G Florida-licensed Mold Assessor will be onsite to examine materials, collect samples of representative materials, and to test for lead-based paint on materials.
- <u>ASBESTOS</u> EE&G will conduct a walk-through of the interior and exterior of the subject buildings to visually assess suspect friable and non-friable asbestos-containing materials (ACM) for condition, homogenous areas, and functional spaces. They will collect representative bulk samples from the interiors/exteriors and roofs of the 3 structures and transport the samples to an in-house asbestos laboratory for analysis. They estimate a maximum of 220 samples will be required to assess each reasonably accessible homogenous area (HA) in the three subject structures. Bulk samples will be analyzed using Polarized Light Microscopy (PLM). Any friable materials found to contain less than 10%

asbestos by visual estimation will require analysis by the objective Point Count Method for confirmation of asbestos content, per United States (US) Environmental Protection Agency (EPA) regulations.

- <u>LEAD-BASED PAINT</u> EE&G will conduct a limited lead-based paint survey in reasonable accessible representative rooms, common areas, and exteriors of the subject structures using the X-ray fluorescence (XRF) method of lead detection. The survey will be performed using state of the art work practices based on a modified version of the protocol established by the Department of Housing and Urban Development (H.U.D.). Up to 10 confirmatory paint chip samples may be collected, if necessary, to verify any "inconclusive" findings produced by the XRF method. The paint chip samples will be analyzed using Atomic Absorption Spectrophotometry (A.A.S.) methods.
- <u>MOLD</u> EE&G will conduct a walk-through inspection of the buildings using visual assessment to determine suspect mold growth on building materials. In addition, EE&G will use infrared thermography and direct reading moisture meters to determine possible areas of water intrusion into the building that could provide the moisture necessary for mold growth. If suspect mold growth is observed, up to 15 direct "tape lift" samples will be collected for examination using optical microscopy by an Environmental Microbiology Laboratory Accreditation Program (EMLAP) certified laboratory.
- EE&G will require access to all areas of the building to conduct the testing.
- CH2M HILL requests copies of any previous reports detailing the locations of asbestos and/or lead containing materials in the buildings.

A \$25,000 budget allowance has been included in this subtask for the environmental testing services.

## Task A.4 - Building Services

The building services testing and evaluation will include the following:

- CH2M HILL will assess the types and condition of HVAC and plumbing in the buildings (Bldg A, B, and Auditorium)
- CH2M HILL will perform the work using internal staff.
- CH2M HILL will interview school maintenance staff to obtain information on the current and past condition and problems of the plumbing in the building.
- CH2M HILL will require access for the crawl spaces to determine the location and sizes of domestic water and sewer piping and the location of connections to the city utility piping mains. These locations for access will be coordinated with the access required for structural and architectural considerations.
- CH2M HILL will provide a report detailing the location and condition of existing HVACrelated equipment and its suitability for reuse in the planned city hall. The report will also detail the condition of the domestic water and sewer piping and its suitability for reuse.
- CH2M HILL requests copies of any existing building mechanical and plumbing plans and specifications.

#### Task A.5 - Electrical Investigation

The electrical investigation and evaluation will include the following:

- Inspection of main electrical service and distribution panels
- Inspection of concealed conductors and raceways in two locations in each building
- Inspect conductors and raceways above the dropped ceilings in several locations within each building
- Inspect concealed conductors and raceways above fixed ceilings utilizing opening cut for structural and architectural inspections.
- Complete a general overview inspection of all existing electrical feeders and subfeeders for each building.
- CH2M HILL will perform the work using internal staff.

The results of the electrical investigation will be included in the condition assessment report as described in Task B.

#### Task A.6 - Geotechnical Investigation

The geotechnical investigation and evaluation will include the following:

- CH2M HILL will retain the services of a professional Geotechnical Engineering Subconsultant to provide subsurface investigations.
- A maximum of four (4) test borings will be performed to determine the soil loading capacity for the school site. The borings will also be used to determine the type(s) of soil on the site, ground water elevation and depth to rock.
- The four test borings will be performed onsite in locations accessible to the drilling rig.
- Expose existing building footing at approximately 4 external locations to determine perimeter footing size (width and thickness).
- Obtain samples from each boring for soil and groundwater analysis for cyanide, arsenic and Volatile Organic Carbons (VOC) as requested by the Owner.

The information obtained by the geotechnical investigation will be used in the structural analysis to determine the loading capacity of the existing structure and the ability to meet the 2010 Florida Building Code requirements for the facility use to be reclassified for use as a City Hall.

A \$20,000 budget allowance has been included in this subtask for the geotechnical drilling and testing services.

## Deliverables

• Test reports and field documentation from Task A will be included in the Condition Assessment.

## Task B - Preparation of a Condition Assessment Report

The ENGINEER will prepare and submit a Condition Assessment Report (including testing data) of the Glynn Archer School facility, (Buildings A, B, and Auditorium) to the CITY.

The Condition Assessment Report will include the following information;

- Results of the structural investigation
- Structural analysis of each building to include connection assessment, floor loadings, identification of all load bearing walls, and overall condition of each building.
- Recommendation for potential reuse retrofit approaches.
- Condition of the building envelope and a description of all areas that do not meet the current Code.
- Suggestions for modifications to bring the buildings into compliance for the 2010 Florida Building Code.
- EE&G will produce a report detailing areas of materials containing asbestos, lead-based paint, and mold and suggested methods of remediation.
- Assessment information on the location and condition of existing HVAC-related equipment and its suitability for reuse in the planned City Hall. The report will also detail the condition of the domestic water and sewer piping and its suitability for reuse.
- Results of the investigation into cisterns and cesspool locations, conditions and existing conditions. Recommendations for remediation if necessary.
- Results of the investigation of the roof drainage discharge system and recommendations for modifications if necessary.
- Results of the electrical system investigation.
- Suggestions for modifying the system to meet current National Electric Code (NEC) and Florida Building Code.
- Recommendation to retain or replace any or all of the electrical system in each building.
- Soil Loading Capacity in pounds per square foot, type of soils present, and the thickness and elevations of the individual soil types identified.
- Results of the soil and groundwater analysis of these tests.

The Engineer will submit an electronic copy of the draft Condition Assessment for the City's review. Upon completion of City's review the ENGINEER will schedule a review meeting where up to two Engineer staff will attend, (all others will attend via conference call, as required) to review document and address questions. Engineer will incorporate comments and discussion items and deliver final documents.

### Deliverables

- An electronic copy of the draft Condition Assessment for review by CITY staff
- Four (4) copies of final Condition Assessment and two (2) electronic copies in PDF format.

# Assumptions

The following assumptions were used in the development of this Task Order:

- Engineer does not mark-up any expenses or subcontractor costs per the current Master Services Agreement (MSA).
- Complete access to the facility will be provided.
- City will assist with Engineers obtain access to roofs and high ceilings areas.
- City will assist in the location of the existing cistern(s).
- City will assist in the location of any existing cesspool(s).
- Budget allowances have been included for the following: soil borings; soil and ground water testing; repair of wall, ceiling, and floor openings; repair of the roof; concrete coring; and Environmental testing services.
- This scope of work does not include cost estimating for the project.
- This scope of work does not include zoning, setback or historical research.
- School Board inspection reports, testing results and drawings will be made available to the ENGINEER.

# Additional Assumptions and Limitations Supplemental Terms and Conditions

ENGINEER's services will be governed by the negligence standard for professional services, measured as of the time those services are performed. To the maximum extent permitted by law, ENGINEER's liability for the CITY's damages for any cause or combination of causes, which arise from ENGINEER's services under this Agreement, in the aggregate, not exceed \$100,000 or the fee for this project, whichever is lower. This indemnity will not apply to claims or damages caused by ENGINEER's intentional misconduct or sole negligence, and

takes precedence over any conflicting articles of this Agreement. As used herein, ENGINEER includes any affiliated corporations, subcontractors, and any of its officers or employees.

In no event shall ENGINEER, its affiliates, officers, employees or subcontractors be liable for any incidental, indirect, special, punitive, economic or consequential damages, including but not limited to, loss of revenue or profits, suffered or incurred by CITY or any of its agents, including other contractors engaged at the site, as a result of this Agreement or ENGINEER's performance or nonperformance of services.

This Provision takes precedence over any conflicting Provision of the Agreement between ENGINEER and the CITY, and any document incorporated into it or referenced by it. These limitations of liabilities shall apply whether such liability is claimed to arise in breach of contract or warranty, tort (including negligence), strict or statutory liability or otherwise.

The CITY waives all claims against ENGINEER, including those for latent defects, that are not brought within two years of substantial completion of the work or final payment to ENGINEER, whichever is later.

This proposed scope of services gives no rights or benefits to anyone other than the CITY and ENGINEER and has no third party beneficiaries.

There is no warranty, expressed or implied, made by ENGINEER in the Condition Assessment Report. Any opinions or recommendations presented apply to site conditions existing when services were performed.

The ENGINEER staff who performs the site assessment are not attorneys; therefore, the final report is not a legal representation or interpretation of environmental laws, rules, regulations, or policies of local, state or federal government agencies.

Draft and final reports shall include the following language, the terms of which are incorporated into this Agreement:

""In preparing this report, CH2M HILL relied, in whole or in part, on data and information provided by CITY and third parties, which information has not been independently verified by CH2MHILL and which CH2M HILL has assumed to be accurate, complete, reliable, and current. Therefore, while CH2M HILL has utilized its best efforts in preparing this Report, CH2M HILL does not warrant or guarantee the conclusions set forth in this Report which are dependent or based upon data, information, or statements supplied by CITY or third parties.

Use of this Report or any information contained herein, if by any party other than CITY, shall be at the sole risk of such party and shall constitute a release and agreement by such party to defend and indemnify CH2M HILL and its affiliates, officers, employees and subcontractors from and against any liability for direct, indirect, incidental, consequential or special loss or damage or other liability of any nature arising from its use of the Report or reliance upon any of its content. To the maximum extent permitted by law, such release

from and indemnification against liability shall apply in contract, tort (including negligence), strict liability, or any other theory of liability."

It is understood and agreed to between the parties, that City shall indemnify and hold harmless Engineer from and against any and all claims, losses, damages, liabilities, and costs, including but not limited, to costs of defense arising out of or in any way connected with the presence, discharge, release, or escape of contaminants of any kind, excepting only such liability as may arise out of the negligence or willful misconduct of Engineer, its employees, consultants or subcontractors in the performance of this Agreement.

# **Obligations of the CITY**

To assist in performing the preliminary inspection outlined in this proposal, the CITY will provide the following:

- The CITY will obtain and provide all available information from the School Board.
- The CITY will coordinate access to the facility for the inspection.
- The CITY will provide all required zoning, setback or historical requirements.
- The CITY will arrange for a school employee(s) familiar with the facility to be present during the testing phase.
- Required CITY employees will be available during the preliminary inspection.

# **Additional Services**

The ENGINEER will, as directed, provide additional services that are related to the project but not included within this Scope of Services. These and other services can be provided, if desired by the CITY, as an amendment to this Task Order upon the mutual agreement of the parties. Work will begin for the Additional Services after receipt of a written notice to proceed from the CITY. Such Additional Services may include:

- Phase 2 Environmental Site Assessment if required.
- Containment and disposal of hazardous materials generated when the openings are cut into the ceiling, floor, walls and roof if hazardous materials are present.
- Additional building inspections other than the those listed under Task A

# Compensation

The estimated compensation for TASK ORDER 6-12 FAC is shown on the attached statement entitled TASK ORDER 6-12 FAC COMPENSATION.

Attachment A TASK ORDER 6-12 FAC COMPENSATION

## TASK ORDER 6-12 FAC COMPENSATION

ENGINEERING SERVICES FOR THE CONDITION ASSESSMENT OF THE GLYNN ARCHER FACILITY

Task		Hours	Labor	Expenses	<b>Total Cost</b>
Task A - On-site testing and Evaluations		532	\$76,336	\$130,900	\$207,236
Task B - Condition Assessment		488	\$63,980	\$2,600	\$66,580
	Total	\$1,020	\$140,316	\$133,500	\$273,816

COMPENSATION BREAKDOWN										
Task Order 6-12 FAC										
TASK NO.	TASK DESCRIPTION	HOURLY RATE	TOTAL HOURS	LABOR	EXPENSES	TOTAL COST				
Α	On-site testing and Evaluations									
	Principal PM/Principal Technologist	\$172.00	116	\$19,952		\$19,952				
	Senior Technologist/Senior PM	\$158.00	254	\$40,132		\$40,132				
	Project Professional	\$122.00	106	\$12,932		\$12,932				
	Tech 4	\$ 96.00	0	\$0		\$0				
	Specification Processor	\$ 84.00	0	\$0		\$0				
	Senior Project Assistant	\$ 63.00	30	\$1,890		\$1,890				
	Clerical	\$ 55.00	26	\$1,430		\$1,430				
	(10) - 2, 3, 6 Day trips to KWF				\$16,000	\$16,000				
	Environmental Testing Sub Allowance				\$25,000	\$25,000				
	Concrete - Geotech Sub Allowance				\$20,000	\$20,000				
	Roofing - GC Sub Allowance				\$67,500	\$67,500				
	Printing/Reprographics/Shipping				\$2,400	\$2,400				
On-site	testing and Evaluations SUBTOTAL		532	\$76,336	\$130,900	\$207,236				
В	Condition Assessment									
	Principal PM/Principal Technologist	\$172.00	74	\$12,728		\$12,728				
	Senior Technologist/Senior PM	\$158.00	170	\$26,860		\$26,860				
	Project Professional	\$122.00	124	\$15,128		\$15,128				
	Tech 4	\$ 96.00	32	\$3,072		\$3,072				
	Specification Processor	\$ 84.00	40	\$3,360		\$3,360				
	Senior Project Assistant	\$ 63.00	24	\$1,512		\$1,512				
	Clerical	\$ 55.00	24	\$1,320		\$1,320				
	(2) - 2 Day trip to KWF				\$1,600	\$1,600				
	Printing/Reprographics/Shipping				\$1,000	\$1,000				
Conditio	on Assessment SUBTOTAL		488	\$63,980	\$2,600	\$66,580				
PROJEC	CT TOTALS									
	TOTAL HOURS		1,020							
	TOTAL FEE ESTIMATE			\$140,316	\$133,500	\$273,816				
TO 6-12	FAC TOTAL		1,020	\$140,316	\$133,500	\$273,816				