RESOLUTION NO. 13-295

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA APPROVING TASK ORDER NO. 12.0D01.B FROM HAYES/CUMMING ARCHITECTS, PA IN AN AMOUNT NOT TO EXCEED $199,720.00 FOR COMPLETE ARCHITECTURAL SERVICES INCLUDING CONCEPT DEVELOPMENT, ENVIRONMENTAL TESTING, PROGRAM DEVELOPMENT, PREPARATION OF RECORD DRAWINGS, SELECTIVE DEMOLITION DESIGN, FULL DESIGN AND CONSTRUCTION DOCUMENTS, BIDDING AND CONSTRUCTION OVERSIGHT OF THE FREDERICK DOUGLASS COMMUNITY CENTER; PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, in Resolution No. 12-220, the City Commission approved a three-year contract with Hayes/Cumming Architects for General Architectural Services; and

WHEREAS, Hayes/Cumming Architects completed a condition assessment of the property, and at the August 20, 2013 the City Commission directed the City Manager to move forward with a plan that includes roof replacement and minor renovations to the gymnasium, as well as demolition and replacement of the adjacent side structure, to bring to property up to 2010 Florida Building Code where applicable and cost effective; and

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, AS FOLLOWS:

Section 1: That Task Order No. 12.0D01.B from Hayes/ Cumming Architects, PA for complete architectural services, including concept development, environmental testing, program development, preparation of record drawings, selective

demolition design, full design and construction documents, bidding and construction oversight of the Frederick Douglass Community Center is hereby approved in an amount not to exceed $199,720.00.

Section 2: That funds for this project are currently budgeted in account 303-1900-51906200.

Section 3: That this Resolution shall go into effect immediately upon its passage and adoption and authentication by the signature of the presiding officer and the Clerk of the Commission.

Passed and adopted by the City Commission at a meeting held this 19 day of November, 2013.

Authenticated by the presiding officer and Clerk of the Commission on November 20, 2013.

Filed with the Clerk November 20, 2013.

Mayor Craig Cates	Yes
Vice Mayor Mark Rossi	Yes
Commissioner Teri Johnston	Yes
Commissioner Clayton Lopez	Yes
Commissioner Billy Wardlow	Yes
Commissioner Jimmy Weekley	Yes
Commissioner Tony Yaniz	Yes

CRAIG CATES, MAYOR

ATTEST:

CHERYL SMITH, CITY CLERK

THE CITY OF KEY WEST
Engineering Department
3140 Flagler Ave Key West, FL 33040 (305) 809-3965

EXECUTIVE SUMMARY

TO: Bob Vitas, City Manager
E. David Fernandez, Asst. City Manager - Operations
Mark Finigan, Asst. City Manager – Administration

FROM: Doug Bradshaw, Director Port and Marina Services

DATE: October 24, 2013

RE: **Approval of a Task Order 12.0D01.B from Hayes Cumming Architects in the amount of $199,720 for complete architectural services including concept development, environmental testing, program development, preparation of record drawings, selective demolition design, full design and construction documents, bidding, and construction oversight of the Frederick Douglass Community Center.**

ACTION STATEMENT:
Approval of this Task Order 12.0D01.B from Hayes Cumming Architects in the amount of $199.720 will allow for complete architectural services of the Frederick Douglass Community Center.

The agreement will be executed pursuant to F.S. 287.055 (CCNA), City Code 2-841, and the City's contract with Hayes Cumming Architects approved by Resolution # 12-220. This falls under Infrastructure Goal#4 of the 2011 Strategic Plan which is the long term sustainability of the City's hard assets.

PURPOSE AND JUSTIFICATION
The City of Key West is in the process of assessing the condition and functionality of the Frederick Douglass Community Center. Hayes Cumming Architects undertook a study in order to fully determine the condition of the structures and the property. That condition assessment is attached. The report indicated that the gymnasium is in fairly good condition with the original side structure needing to be demolished (not including the remaining Roosevelt Sands Clinic). That task order's original cost was $187,783, but involved several phases from structural assessment to conceptual drawings that the City at its option could terminate at any point once a clear direction on design was determined. This occurred at the August 20, 2013 City Commission meeting where Commissioners directed the City Manager to move forward with a plan that included roof replacement and minor renovations (window/door replacement) to the gymnasium as well as demolishing and complete replacement of the adjacent original side structure. Additionally the gymnasium will be brought up to the 2010 Florida Building Code

where applicable and cost effective. Only $60,443 of the original task order was utilized.

The four options that were presented to City Commission were as follows:

1. Do nothing, close the building and demolish it. Anticipated costs are expected to be $200,000 -$250,000.
2. Allow the exiting gymnasium to remain as is without any renovation. And replace the one-story portion to the west of the gymnasium with new office & restroom facilities. Anticipated costs are expected to be $1,050,000 -$1,210,000.
3. Given that the building is a contributing structure within the Bahama Village National Historic District provide alternative approaches to comply with the intent of the FBC and thereby extend the useful life of the building. This approach includes replacing the one-story portion to the west of the gymnasium and new office & restrooms. Anticipated costs are expected to be $1,260,000 -$1,410,000.
4. Bring the building into compliance with the requirements of the 2010 Florida Building Code and 2010 Florida Fire Prevention Code. Anticipated costs are expected to be $2,360,000 -$2,710,000.

The attached task order in the amount of $199.720 completes the direction given by the Commission (option 3) by providing for complete architectural services including program development, concept development, environmental testing, , preparation of record drawings, selective demolition design, full design and construction documents, bidding, and construction oversight of the Frederick Douglass Community Center. The cost breakdown is as follows:

1. Preliminary Investigation/Analysis ($15,098): This will determine how to separate the main structure and clinic building from the structure to be demolished as they all have common structural elements.
2. Phase I Hazardous Materials Assessment ($10,000): This will identify any hazardous materials that may exist in the structures and how to properly dispose of them during demolition.
3. Preparation of Record Drawings ($24,333): The City is unable to locate record drawings for the existing structures. In order to properly design modifications to the existing structures or incorporate new structures a full understanding of what has been constructed is needed. This is a very labor intensive exercise.
4. Minor Programming ($3,089): The architect will work with City Staff to determine the current program needs for the new structure to be constructed.
5. Selective Demolition Drawings ($8,425): This will be development of the bid package for removal of the one-story structure.
6. Schematic Design ($20,825): Based on the programming for the building and the City's needs, the architect will develop several options for design and construction. This step will also include the City planning approval process.
7. Design Development ($32,025): Based on the selection and direction provided by the City in the schematic design phase, the architect will fully develop the design and programming for all major elements of the facility as well as update cost estimates.
8. Construction Documents ($55,675): Full construction drawings and specifications for bidding will be developed.
9. Bidding Phase Services ($6,425): Architect will assist staff in the pre-bid conference as well as responding to all questions by bidders.

10. Construction Phase Services ($23,825): Architect will inspect all major phases of construction, sign off on pay applications, review and approve any changes to design, respond to all requests for information from contractor, and approve final completion of the project.

The above dollar amounts reflect maximum amounts for each task. Only actual labor hours and expenses incurred will be billed to the City. Based on the numerous additional steps of the task order above the basic construction document development, staff feels the task identified and associate costs are reasonable and appropriate.

FINANCIAL IMPACT:
The complete architectural services task order as described above is $199,720. The project is budgeted in account 303-1900-519.6200. The City has programmed approximately $1.7 million toward the full project.

RECOMMENDATION:
Staff recommends approving Task Order 12.0D01.B from Hayes Cumming Architects in the amount of $199,720 for complete architectural services of the Frederick Douglass Community Center.

TASK ORDER 12.0D01.B

PROGRAMMING, RECORD DRAWINGS, COMPREHENSIVE ARCHITECTURAL DESIGN SERVICES FREDERICK DOUGLASS RECREATION CENTER

This TASK ORDER 12.0D01.B is issued under the terms and conditions of the MASTER AGREEMENT TO FURNISH GENERAL ARCHITECTURAL SERVICES TO THE CITY OF KEY WEST ("AGREEMENT") between the City of Key West ("CITY") and HAYES | CUMMING ARCHITECTS, P.A. ("ARCHITECT") executed on August 7, 2012, which is incorporated herein by this reference.

A. SCOPE OF SERVICES
Specific services which the ARCHITECT agrees to furnish are summarized on the attached statement entitled TASK ORDER 12.0D01.B "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 Master Agreement.

B. TIME OF COMPLETION
Work under this Task Order will begin immediately following acceptance and completed expeditiously subject to coordination with the City of Key West staff. Work will commence upon the receipt of Purchase Order and Notice to Proceed from the City of Key West Engineering Department. Assuming timely review and approval by the City of each task listed and other key milestones, we anticipate completion of all tasks through Construction Document Phase Services in 120-150 days from Notice to Proceed. 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. COMPENSATION
Compensation for the labor and expenses portion of TASK ORDER 12.0D01.B Tasks A and B will be on a lump sum fee basis as stipulated in Article 5, Paragraph 5.1.1 of the AGREEMENT. Compensation for all expenses will be on a Cost Reimbursable-Per Diem basis as stipulated in Article 5, Paragraph 5.1.2 of the AGREEMENT. The estimated compensation is shown on the attached statement entitled TASK ORDER 12.0D01.B COMPENSATION.

D. ACCEPTANCE
By signature, the parties each accept the provisions of this TASK ORDER 12.0D01.B, and authorize the ARCHITECT 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 HAYES | CUMMING ARCHITECTS

By: _____
Andrew M. Hayes, AIA, LEED BD+C
Managing Principal

For CITY OF KEY WEST

By: _____
Bob Vitas
City Manager

Dated the 25th day of November, 2013

ATTEST: Cheryl Navarro

TASK ORDER 12.0D01.B

PROGRAMMING, RECORD DRAWINGS, COMPREHENSIVE ARCHITECTURAL DESIGN SERVICES FREDERICK DOUGLASS RECREATION CENTER

SCOPE OF SERVICES

Project Description

Under a previous Task Order, the CITY engaged the ARCHITECT to analyze the structure of the existing Gymnasium. Based on the information obtained under that Task Order the CITY has verified that the Frederick Douglass Gymnasium is structurally sound, although it does not meet all of the requirements of the 2010 Florida Building Code (FBC).

This building is a contributing property, located within Old Town Key West, in a designated historic district on the National Register of Historic Places. Because the Frederick Douglas Gym has this historic designation, it falls under specific requirements and exceptions of the 2010 Florida Building Code-Existing Building (FBC-EB). Chapter 11 of the FBC-EB states there are exceptions that allow the Frederick Douglass Gym to be partially renovated without being brought into full compliance with all of the standards required within the 2010 FBC-EB.

The City has elected to move forward with a roof replacement and minor renovation of the high bay gymnasium in order to preserve the historic character of this portion of the structure. Immediately to the southwest of the high bay gymnasium is a one story structure that has been condemned due to significant deterioration and damage to its structural system. The one story building will be demolished and replaced. A portion of the roof structure above the one story building is co-mingled with the roof framing of the medical clinic immediately adjoining and to the southwest. The removal of this portion of the roof will require more than typical investigation to determine how to accomplish the demolition and maintain the structural integrity of the adjoining medical clinic building.

Purpose

The CITY has requested that the ARCHITECT provide assistance with preliminary investigation/ analysis, hazardous materials survey (Phase I), preparation of record drawings for the existing building to remain, preparation of demolition drawings, minor programming, architectural design, construction documents, bidding and negotiation, and construction administration services.

These services are necessary in order to provide the CITY with a building that is serviceable and meets the existing programmatic needs of the users and the adjacent community.

Outline of Tasks/Scope of Professional Services

The following tasks describe the activities to be performed for this Task Order.

Task A – Pre Design

- Preliminary Investigation/Analysis
- Hazardous Materials Survey (Phase I)
- Preparation of record drawings for the existing building to remain
- Minor Programming

Task B – Basic Services: Civil & Architectural Scope

- Preparation of Selective Demolition Drawings

TASK ORDER 12.0D01.B

PROGRAMMING, RECORD DRAWINGS, COMPREHENSIVE ARCHITECTURAL DESIGN SERVICES FREDERICK DOUGLASS RECREATION CENTER

- Schematic Design, Design Development & Construction Document Phase Services
- Bidding Phase Services
- Construction Phase Services

TASK A: SCOPE OF PRE DESIGN SERVICES

Preliminary Investigation & Analysis: Specific further analysis to determine the appropriate method to separate the structure of the one story condemned portion of the building from the high-bay gymnasium and wood frame medical clinic.

Hazardous Materials Survey: Conduct a Phase I Environmental Survey to determine what, if any, hazardous materials exist within the existing building and the appropriate method of remediation of any materials found based on the anticipated scope of renovation work.

Preparation of Record Drawings: The City is unable to provide as-built or record drawings of the high-bay gymnasium and the prior Task Order was terminated before it was completed. Additional field work will need to be conducted to produce record drawings of this portion of the building and additional drafting time is required to produce wall sections, ARCHITECTural details and roof details to accurately document all of the necessary conditions required to proceed forward with design services. Trips by the ARCHITECT and engineering consultants to field verify their discipline's specific field conditions.

Minor Programming: One meeting with the user group and City Project Manger to determine the function and number of spaces to be put into the one-story section of the building that will replace the condemned structure

TASK B: SCOPE OF BASIC SERVICES

The ARCHITECT's Basic Services consist of those described in the Outline of Tasks/Scope of Professional Services above and include usual and customary structural, mechanical, and electrical engineering services. Services not set forth in Outline of Tasks/Scope of Professional Services are Additional Services.

The ARCHITECT shall manage the ARCHITECT's services, consult with the CITY, research applicable design criteria, attend Project meetings, communicate with members of the Project team and report progress to the CITY.

The ARCHITECT shall coordinate its services with those services provided by the CITY and the CITY's consultants. The ARCHITECT shall be entitled to rely on the accuracy and completeness of services and information furnished by the CITY and the CITY's consultants. The ARCHITECT shall provide prompt written notice to the CITY if the ARCHITECT becomes aware of any error, omission or inconsistency in such services or information.

As soon as practicable after the date of this Agreement, the ARCHITECT shall submit for the CITY's approval a schedule for the performance of the ARCHITECT's services. The schedule initially shall include anticipated dates for the commencement of construction and for

Substantial Completion of the Work as set forth in the Initial Information. The schedule shall include allowances for periods of time required for the CITY's review, for the performance of the CITY's consultants, and for approval of submissions by authorities having jurisdiction over the Project. Once approved by the CITY, time limits established by the schedule shall not, except for reasonable cause, be exceeded by the ARCHITECT or CITY. With the CITY's approval, the ARCHITECT shall adjust the schedule, if necessary, as the Project proceeds until the commencement of construction.

The ARCHITECT shall not be responsible for an CITY's directive or substitution made without the ARCHITECT's approval.

The ARCHITECT shall, at appropriate times, contact the governmental authorities required to approve the Construction Documents and the entities providing utility services to the Project. In designing the Project, the ARCHITECT shall respond to applicable design requirements imposed by such governmental authorities and by such entities providing utility services.

The ARCHITECT shall assist the CITY in connection with the CITY's responsibility for filing documents required for the approval of governmental authorities having jurisdiction over the Project.

i. SELECTIVE DEMOLITION DESIGN SERVICES

Prior to the commencement of Design phase services the ARCHITECT will attempt to determine what portions of the building will require demolition and produce a preliminary set of demolition drawings that illustrate this work. These drawings will be used to guide the Hazardous Materials testing scope of work. During each phase of design the Architect will update these drawings as required.

ii. SCHEMATIC DESIGN PHASE SERVICES

The ARCHITECT shall review the program and other information furnished by the CITY, and shall review laws, codes, and regulations applicable to the ARCHITECT's services.

The ARCHITECT shall prepare a preliminary evaluation of the CITY's program, schedule, and budget for the Cost of the Work, Project site, and the proposed procurement or delivery method and other Initial Information, each in terms of the other, to ascertain the requirements of the Project. The ARCHITECT shall notify the CITY of (1) any inconsistencies discovered in the information, and (2) other information or consulting services that may be reasonably needed for the Project.

The ARCHITECT shall present its preliminary evaluation to the CITY and shall discuss with the CITY alternative approaches to design and construction of the Project, including the feasibility of incorporating environmentally responsible design approaches. The ARCHITECT shall reach an understanding with the CITY regarding the requirements of the Project.

Based on the Project's requirements agreed upon with the CITY, the ARCHITECT shall prepare and present for the CITY's approval a preliminary design illustrating the scale and relationship of the Project components.

Based on the CITY's approval of the preliminary discussions, the ARCHITECT shall prepare Schematic Design Documents for the CITY's approval. The Schematic Design Documents shall consist of drawings and other documents including a site plan, if appropriate, and preliminary building plans, sections and elevations; and may include some combination of study models, perspective sketches, or digital modeling. Preliminary selections of major building systems and construction materials shall be noted on the drawings or described in writing.

The ARCHITECT shall consider environmentally responsible design alternatives, such as material choices and building orientation, together with other considerations based on program and aesthetics, in developing a design that is consistent with the CITY's program, schedule and budget for the Cost of the Work. The CITY may obtain other environmentally responsible design services under separate contract.

The ARCHITECT shall consider the value of alternative materials, building systems and equipment, together with other considerations based on program and aesthetics, in developing a design for the Project that is consistent with the CITY's program, schedule and budget for the Cost of the Work.

The ARCHITECT shall submit to the CITY an estimate of the Cost of the Work prepared in accordance with a mutually agreed upon format

The ARCHITECT shall submit the Schematic Design Documents to the CITY, and request the CITY's approval.

iii. DESIGN DEVELOPMENT PHASE SERVICES

Based on the CITY's approval of the Schematic Design Documents, and on the CITY's authorization of any adjustments in the Project requirements and the budget for the Cost of the Work, the ARCHITECT shall prepare Design Development Documents for the CITY's approval. The Design Development Documents shall illustrate and describe the development of the approved Schematic Design Documents and shall consist of drawings and other documents including plans, sections, elevations, typical construction details, and diagrammatic layouts of building systems to fix and describe the size and character of the Project as to architectural, structural, mechanical and electrical systems, and such other elements as may be appropriate. The Design Development Documents shall also include outline specifications that identify major materials and systems and establish in general their quality levels.

The ARCHITECT shall update the estimate of the Cost of the Work.

The ARCHITECT shall submit the Design Development Documents to the CITY, advise the CITY of any adjustments to the estimate of the Cost of the Work, and request the CITY's approval.

iv. CONSTRUCTION DOCUMENTS PHASE SERVICES

Based on the CITY's approval of the Design Development Documents, and on the CITY's authorization of any adjustments in the Project requirements and the budget for the Cost of the Work, the ARCHITECT shall prepare Construction Documents for the CITY's approval. The Construction Documents shall illustrate and describe the further development of the approved Design Development Documents and shall consist of Drawings and Specifications setting forth in detail the quality levels of materials and systems and other requirements for the construction of the Work. The CITY and ARCHITECT acknowledge that in order to construct the Work the Contractor will provide additional information, including Shop Drawings, Product Data, Samples and other similar submittals, which the ARCHITECT shall review in accordance with the data below.

The ARCHITECT shall incorporate into the Construction Documents the design requirements of governmental authorities having jurisdiction over the Project.

During the development of the Construction Documents, the ARCHITECT shall assist the CITY in the development and preparation of (1) bidding and procurement information that describes the time, place and conditions of bidding, including bidding or proposal forms; (2) the form of agreement between the CITY and Contractor; and (3) the Conditions of the Contract for Construction (General, Supplementary and other Conditions). The ARCHITECT shall also compile a project manual that includes the Conditions of the Contract for Construction and Specifications and may include bidding requirements and sample forms.

The ARCHITECT shall update the estimate for the Cost of the Work.

The ARCHITECT shall submit the Construction Documents to the CITY, advise the CITY of any adjustments to the estimate of the Cost of the Work, take any action required as required below, and request the CITY's approval.

v. BIDDING PHASE SERVICES

GENERAL
Following the CITY's approval of the Construction Documents, the ARCHITECT shall assist the CITY in (1) obtaining either competitive bids or negotiated proposals; (2) determining the successful bid or proposal, if any; and, (3) and selecting the General Contractor to award a contract for construction.

COMPETITIVE BIDDING
Bidding Documents shall consist of bidding requirements and proposed Contract Documents.

The ARCHITECT shall assist the CITY in bidding the Project by

.1 Attending a pre-bid conference for prospective bidders conducted by the CITY;

.2 preparing responses to questions from prospective bidders and providing. clarifications and interpretations of the Bidding Documents to all prospective bidders in the form of addenda.

The ARCHITECT shall consider requests for substitutions, if the Bidding Documents permit substitutions, and shall prepare and distribute addenda identifying approved substitutions to all prospective bidders.

vi. CONSTRUCTION PHASE SERVICES

GENERAL
The ARCHITECT shall provide administration of the Contract between the CITY and the Contractor as set forth below and in the General Conditions of the Contract for Construction. If the CITY and Contractor modify the Construction Contract, those modifications shall not affect the ARCHITECT's services under this Agreement unless the CITY and the ARCHITECT amend this Agreement.

The ARCHITECT shall advise and consult with the CITY during the Construction Phase Services. The ARCHITECT shall have authority to act on behalf of the CITY only to the extent provided in this Agreement. The ARCHITECT shall not have control over, charge of, or responsibility for the construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, nor shall the ARCHITECT be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The ARCHITECT shall be responsible for the ARCHITECT's negligent acts or omissions, but shall not have control over or charge of, and shall not be responsible for, acts or omissions of the Contractor or of any other persons or entities performing portions of the Work.

Subject to Section 4.3, the ARCHITECT's responsibility to provide Construction Phase Services commences with the award of the Contract for Construction and terminates on the date the ARCHITECT issues the final Certificate for Payment.

EVALUATIONS OF THE WORK
The ARCHITECT shall visit the site at intervals appropriate to the stage of construction, or as otherwise required to become generally familiar with the progress and quality of the portion of the Work completed, and to determine, in general, if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the ARCHITECT shall not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. On the basis of the site visits, the ARCHITECT shall keep the CITY reasonably informed about the progress and quality of the portion of the Work completed, and report to the CITY (1) known deviations from the Contract Documents and from the most recent construction schedule submitted by the Contractor, and (2) defects and deficiencies observed in the Work.

The ARCHITECT has the authority to reject Work that does not conform to the Contract Documents. Whenever the ARCHITECT considers it necessary or advisable, the ARCHITECT shall have the authority to require inspection or testing of the Work in accordance with the provisions of the Contract Documents, whether or not such Work is fabricated, installed or completed. However, neither this authority of the ARCHITECT nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the ARCHITECT to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees or other persons or entities performing portions of the Work.

The ARCHITECT shall interpret and decide matters concerning performance under, and requirements of, the Contract Documents on written request of either the CITY or Contractor. The ARCHITECT's response to such requests shall be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

CERTIFICATES FOR PAYMENT TO CONTRACTOR
The ARCHITECT shall review and certify the amounts due the Contractor and shall issue certificates in such amounts. The ARCHITECT's certification for payment shall constitute a representation to the CITY, based on the ARCHITECT's evaluation of the Work and on the data comprising the Contractor's Application for Payment, that, to the best of the ARCHITECT's knowledge, information and belief, the Work has progressed to the point indicated and that the quality of the Work is in accordance with the Contract Documents. The foregoing representations are subject (1) to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, (2) to results of subsequent tests and inspections, (3) to correction of minor deviations from the Contract Documents prior to completion, and (4) to specific qualifications expressed by the ARCHITECT.

The issuance of a Certificate for Payment shall not be a representation that the ARCHITECT has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, (2) reviewed construction means, methods, techniques, sequences or procedures, (3) reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by the CITY to substantiate the Contractor's right to payment, or (4) ascertained how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

The ARCHITECT shall maintain a record of the Applications and Certificates for Payment.

SUBMITTALS
The ARCHITECT shall review the Contractor's submittal schedule and shall not unreasonably delay or withhold approval. The ARCHITECT's action in reviewing submittals shall be taken in accordance with the approved submittal schedule or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the ARCHITECT's professional judgment to permit adequate review.

In accordance with the ARCHITECT-approved submittal schedule, the ARCHITECT shall review and approve or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for the limited purpose of checking for

conformance with information given and the design concept expressed in the Contract Documents. Review of such submittals is not for the purpose of determining the accuracy and completeness of other information such as dimensions, quantities, and installation or performance of equipment or systems, which are the Contractor's responsibility. The ARCHITECT's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the ARCHITECT, of any construction means, methods, techniques, sequences or procedures. The ARCHITECT's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

If the Contract Documents specifically require the Contractor to provide professional design services or certifications by a design professional related to systems, materials or equipment, the ARCHITECT shall specify the appropriate performance and design criteria that such services must satisfy. The ARCHITECT shall review Shop Drawings and other submittals related to the Work designed or certified by the design professional retained by the Contractor that bear such professional's seal and signature when submitted to the ARCHITECT. The ARCHITECT shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications and approvals performed or provided by such design professionals.

The ARCHITECT shall review and respond to requests for information about the Contract Documents. The ARCHITECT shall set forth in the Contract Documents the requirements for requests for information. Requests for information shall include, at a minimum, a detailed written statement that indicates the specific Drawings or Specifications in need of clarification and the nature of the clarification requested. The ARCHITECT's response to such requests shall be made in writing within any time limits agreed upon, or otherwise with reasonable promptness. If appropriate, the ARCHITECT shall prepare and issue supplemental Drawings and Specifications in response to requests for information.

The ARCHITECT shall maintain a record of submittals and copies of submittals supplied by the Contractor in accordance with the requirements of the Contract Documents.

CHANGES IN THE WORK
The ARCHITECT may authorize minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time.

The ARCHITECT shall maintain records relative to changes in the Work.

PROJECT COMPLETION
The ARCHITECT shall conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion; receive from the Contractor and forward to the CITY, for the CITY's review and records, written warranties and related documents required by the Contract Documents and assembled by the Contractor; and issue a final Certificate for Payment based upon a final inspection indicating the Work complies with the requirements of the Contract Documents.

The ARCHITECT's inspections shall be conducted with the CITY to check conformance of the Work with the requirements of the Contract Documents and to verify the accuracy and completeness of the documentation submitted by the Contractor of Work to be completed or corrected.

When the Work is found to be substantially complete, the ARCHITECT shall inform the CITY about the balance of the Contract Sum remaining to be paid the Contractor, including the amount to be retained from the Contract Sum, if any, for final completion or correction of the Work.

The ARCHITECT shall forward to the CITY the following information received from the Contractor: (1) consent of surety or sureties, if any, to reduction in or partial release of retainage or the making of final payment; (2) affidavits, receipts, releases and waivers of liens or bonds indemnifying the CITY against liens; and (3) any other documentation required of the Contractor under the Contract Documents.

Upon request of the CITY, and prior to the expiration of one year from the date of Substantial Completion, the ARCHITECT shall, without additional compensation, conduct a meeting with the CITY to review the facility operations and performance.

ASSUMPTIONS

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

- ARCHITECT 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 ARCHITECT team to obtain access to roofs and high ceiling areas.
- Budget allowances have been included for the hazardous materials testing services and repair of wall, ceiling, and floor openings, and repair of the roof.
- This scope of work does include limited cost estimating for the project.
- This scope of work does not include zoning, setback or historical research.
- Any inspection reports, testing results and drawings will be made available to the ARCHITECT.

OBLIGATIONS TO THE CITY

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

- The CITY will obtain and provide all available information on this facility from its archives within 15 days of signing this task order.
- The CITY will coordinate access to the facility for the inspections.
- The CITY will provide all required zoning, setback and/or historical requirements.
- The CITY will arrange for employee(s) familiar with the facility to be present during the testing phase.

- Required CITY employees will be available during the preliminary inspections.

ADDITIONAL SERVICES

The ARCHITECT will, as directed, provide additional services that are related to the project but not included within the Scope of Basic 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.
- Civil Engineering Services
- Additional building inspections other than the those listed under Tasks A and B.

COMPENSATION

The estimated compensation for TASK ORDER 12.0D01.B is shown on the attached statement titled TASK ORDER 12.0D01.B COMPENSATION.

TASK ORDER 12.0D01.B

PROGRAMMING, RECORD DRAWINGS, COMPREHENSIVE ARCHITECTURAL DESIGN SERVICES FREDERICK DOUGLASS RECREATION CENTER

Attachment A

TASK ORDER 12.0D01.B COMPENSATION

TASK ORDER 12.0D01.B COMPENSATION
COMPREHENSIVE ARCHITECTURAL DESIGN SERVICES FOR
THE FREDERICK DOUGLASS RECREATION CENTER

Task		Hours	Labor	Expenses	Total Cost
Task A – Pre Design					
Preliminary Investigation/Analysis		112	$ 12,248	$ 2,850	$ 15,098
Phase I Hazardous Materials Survey				$ 10,000	$ 10,000
Preparation of Record Drawings		210	$ 23,308	$ 1,025	$ 24,333
Minor Programming		20	$ 2,664	$ 425	$ 3,089
Task B – Basic Architectural Services					
Selective Demolition Drawings	Lump Sum		$ 8,000	$ 425	$ 8,425
Schematic Design Phase Services	Lump Sum		$ 20,400	$ 425	$ 20,825
Design Development Phase Services	Lump Sum		$ 31,600	$ 425	$ 32,025
Construction Document Phase Services	Lump Sum		$ 53,000	$ 2,675	$ 55,675
Bidding Phase Services	Lump Sum		$ 6,000	$ 425	$ 6,425
Construction Phase Services	Lump Sum		$ 20,000	$ 3,825	$ 23,825
Total	**As Required**		**$177,220**	**$ 22,500**	**$ 199,720**

COMPENSATION BREAKDOWN

Task Order No. 12.0D01.B

Last Revised: 10/24/2013

TASK NO.	TASK DESCRIPTION	HOURLY RATE	TOTAL HOURS	LABOR COST	NUMBER	EXPENSE COST	LINE ITEM TOTAL
A	**PRELIMINARY INVESTIGATION ANALYSIS**						
	Preliminary Investigation/Analysis Phase I Hazardous Materials Survey						
	ARCHITECTURE						
	Managing Principal	$180.00	8	$1,440			
	Staff Architect	$125.00	16	$2,000			
	Sr. Intern	$88.00	40	$3,520			
	Admin/Student	$42.00	4	$168			
	STRUCTURAL ENGINEERING						
	President	$180.00	4	$720			
	Sr. Project Manager	$155.00	0	$0			
	Project Manager	$145.00	12	$1,740			
	Structural Tech	$105.00	0	$0			
	CAD Tech	$95.00	24	$2,280			
	Construction Administrator	$95.00	4	$380			
			112	$12,248			
	Preparation of Record Drawings						
	ARCHITECTURE						
	Managing Principal	$180.00	8	$1,440			
	Staff Architect	$125.00	32	$4,000			
	Sr. Intern	$88.00	80	$7,040			
	Admin/Student	$42.00	4	$168			
	STRUCTURAL ENGINEERING						
	President	$180.00	2	$360			
	Sr. Project Manager	$155.00	4	$620			
	Project Manager	$145.00	8	$1,160			
	Structural Tech	$105.00	0	$0			
	CAD Tech	$95.00	32	$3,040			
	Construction Administrator	$95.00	8	$760			
	MECH/ELEC/ PLUMB ENGINEERING						
	Principal, PE	$170.00	16	$2,720			
	Project Engineer	$125.00	16	$2,000			
			210	$23,308			
	Minor Programming						
	ARCHITECTURE						
	Managing Principal	$180.00	6	$1,080			
	Staff Architect	$125.00	12	$1,500			
	Sr. Intern	$88.00	0	$0			
	Admin/Student	$42.00	2	$84			
			20	$2,664			

	Expenses				
	Allowance - Phase I Hazardous Materials Testing		1	$10,000	$10,000
	Site Visit (Personnel-5)		1	$2,850	$2,850
	Site Visit (Personnel-1)		2	$425	$850
	Reprographics/Shipping		1	$600	$600
TASK LABOR		664 $38,220			
TASK EXPENSES				$14,300	
TASK SUB TOTAL					**$52,520**

B	BASIC ARCHITETCURAL SERVICES	ARCHITECTURE/CIVIL/STRUCTURAL/MECHANICAL/ ELECTRICAL/ PLUMBING					
	Selected Demolition Drawings						
	ARCHITECTURE						
	Managing Principal	$180.00	9	$1,620			
	Staff Architect	$125.00	16	$2,000			
	Sr. Intern	$88.00	45	$3,960			
	Admin/Student	$42.00	10	$420			
			80	$8,000			
	Schematic Design Phase						
	ARCHITECTURE						
	Managing Principal	$180.00	24	$4,320			
	Staff Architect	$125.00	40	$5,000			
	Sr. Intern	$88.00	114	$10,032			
	Admin/Student	$42.00	25	$1,050			
			203	$20,400			
	Design Development Phase						
	ARCHITECTURE						
	Managing Principal	$180.00	34	$6,120			
	Staff Architect	$125.00	56	$7,000			
	Sr. Intern	$88.00	160	$14,080			
	Admin/Student	$42.00	40	$1,680			
	STRUCTURAL ENGINEERING						
	Fee			$2,720			
			290	$31,600			
	Construction Document Phase						
	ARCHITECTURE						
	Managing Principal	$180.00	24	$4,320			
	Staff Architect	$125.00	40	$5,000			
	Sr. Intern	$88.00	180	$15,840			
	Admin/Student	$42.00	20	$840			
	CIVIL ENGINEERING						
	Fee			$4,000			
	STRUCTURAL ENGINEERING						
	Fee			$9,000			
	MECH/ELEC/ PLUMB ENGINEERING						
	Fee	$170.00	16	$14,000			
			280	$53,000			
	Bidding Phase						
	ARCHITECTURE						
	Managing Principal	$180.00	8	$1,440			
	Staff Architect	$125.00	8	$1,000			
	Sr. Intern	$88.00	29	$2,552			
	Admin/Student	$42.00	24	$1,008			
			69	$6,000			

	Construction Phase						
	ARCHITECTURE						
	Managing Principal	$180.00	40	$7,200			14 Visits
	Staff Architect	$125.00	0	$0			
	Sr. Intern	$88.00	40	$3,520			
	Admin/Student	$42.00	40	$1,680			
	CIVIL ENGINEERING						
	Fee			$1,200			2 Visits
	STRUCTURAL ENGINEERING						
	Fee			$3,200			3 Visits
	MECH/ELEC/ PLUMB ENGINEERING						
	Fee			$3,200			3 Visits
			120	$20,000			
	Expenses						
	Site Visit (Personnel-5)				0	$2,850	$0
	Site Visit (Personnel-1)				14	$425	$5,950
	Reprographics/Shipping				1	$2,250	$2,250
TASK LABOR			1042	$139,000			
TASK EXPENSES						$8,200	
TASK SUB TOTAL							**$147,200**
PROJECT LABOR (Does not include Consultant Hours)			1706	$177,220			
PROJECT EXPENSES						$22,500	
TASK ORDER TOTAL							**$199,720.00**

hayes | cumming | benson architects

FINAL REPORT

FOR:

CITY OF KEY WEST
FREDERICK DOUGLASS GYM

TASK 'A" – STRUCTURAL ASSESSMENT

111 OLIVIA STREET, KEY WEST, FLORIDA

PROJECT NUMBER & TASK ORDER NUMBER: 12.0D01A

JULY 31, 2013

hayes | cumming | benson architects 2210 central avenue, suite 100 st. petersburg, florida 33712
ph.727.321.0900 fx.727.321.0903 www.hc-arc.com
aa26001260

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EXECUTIVE SUMMARY

The structural integrity of the existing building was tested per the requirements of the task order. The specific results of the testing are shown in later sections of this report. The purpose of evaluating the building structure at this point is to make a go/no go decision.

The City must determine whether it is appropriate to continue using the Frederick Douglass gymnasium for recreational services and programs. In considering the various options for use, we are doing so with the understanding that the anticipated life cycle of the building will be for at least another 30 years. Additionally, there are historic and sentimental issues that also are part of this decision making process. With that understanding we will examine the possible options.

Four possible courses of action and possible costs were reviewed in a meeting on July 19, 2013:

A. Do nothing, close the building and demolish it. Anticipated costs are expected to be $200,000 - $250,000.

B. Allow the exiting gymnasium to remain as is without any renovation. And replace the one-story portion to the west of the gymnasium with new office & restroom facilities. Anticipated costs are expected to be $1,050,000 - $1,210,000.

C. Given that the building is a contributing structure within the Bahama Village National Historic District provide alternative approaches to comply with the intent of the FBC and thereby extend the useful life of the building. This approach includes replacing the one-story portion to the west of the gymnasium and new office & restrooms. Anticipated costs are expected to be $1,260,000 - $1,410,000.

D. Bring the building into compliance with the requirements of the 2010 Florida Building Code and 2010 Florida Fire Prevention Code. Anticipated costs are expected to be $2,360,000 - $2,710,000.

During that meeting the City and the Architect made the decision as a team to move forward with Option 'C' and agreed that an estimated construction budget of $1,500,000 should be established. Nptes from that meeting occur later in this report.

TASK 'A' - STRUCTURAL ANALYSIS

Per Task 'A' of the Task Order, the structural testing and evaluation was performed and included the following:

- Roof Deck: The roof deck appears to be composed of cementitious fiber board on bulb tee concrete tertiary members on intermediate steel bar joists running perpendicular to the main steel structural trusses. The existing roof steel framing system has been evaluated and the results are provided in the enclosed report by McCarthy & Associates. The roof membrane and its integrity will be tested during Task B.

- Concrete Walls: Upon visually inspecting the concrete columns and masonry walls of the gymnasium it was decided that Subsurface Interface Radar would be used to determine the size and location of steel reinforcing. This testing method is less invasive than taking concrete core samples. This testing method also allowed determination of the steel reinforcing within the horizontal concrete tie beams above and below the walls without impacting their structural integrity. The results of this testing are contained in the report by Concrete Analysis & Testing Laboratories.

- Floor/Foundation System: Since concrete compression testing was necessary to determine the compressive capacity of the concrete, a mid-wall footing was chosen as destructive testing at this location will have the least impact on the integrity of the structural system. Six core samples were taken and break tests were conducted. The results of these test are found in the report by Concrete Analysis & Testing Laboratories.

- Subsurface Soil Conditions: Soil borings were taken to identify the potential soil qualities and bearing capacities should any future work be undertaken. The results of these tests are included in the report by Wingerter Laboratories.

- Compliance with the 2010 Florida Building Code: The building testing information obtained from the above operations on member sizes, locations and connections was used to perform a structural analysis of the building and create a suggested approach for retrofitting the building to meet 2010 Florida Building Code and hurricane requirements. The results of that analysis and design approach are included within the report and drawings of McCarthy & Associates

POSSIBLE COURSES OF ACTION

The four possible courses of action exist for this building, and are as follows:

A. Do nothing, close the building and demolish it.

B. Allow the exiting gymnasium to remain as is, with the renovation of the gym roof to extend the useful life of the building by another 25-30 years. This assumes that the one-story portion to the west of the gymnasium is completely separated from the high bay gym and restroom facilities are provided to comply with the 2010 Florida Building Code – Existing Building and 2010 Florida Plumbing Code.

C. Given that the building is a contributing structure within the Bahama Village National Historic District it meets the definition of 'Historic Building' under Section 1102 of the 2010 Florida Building Code – Existing Building. Sections 1104, 1105 and 1106 provide alternative approaches to comply with the intent of the FBC and thereby extend the useful life of the building with limited renovation. This approach anticipates the removal of up to 30% of the roof deck and structural roof member augmentation, or covering the roof with a completely new deck that meets current code, replacement of the existing windows and miscellaneous envelope upgrades and repainting. The one-story portion to the west of the gymnasium is completely separated and office/restroom/storage facilities are provided to comply with the 2010 Florida Building Code – Existing Building and 2010 Florida Plumbing Code.

D. Bring the building into compliance with the requirements of the 2010 Florida Building Code and 2010 Florida Fire Prevention Code. Under this approach a completely new steel structural frame is installed from within the building, the exterior building envelope and all windows/doors are replaced with equipment that meets current code, a new foundation system and gym floor is installed, and miscellaneous other improvements to finishes and repainting are provided. The one-story portion to the west of the gymnasium is completely separated and office/restroom/storage facilities are provided.

POTENTIAL COSTS

A. Demolish & Remove the Building	Low	High
Demolition	$100,000	$120,000
Removal	$60,000	$80,000
Land Fill	$40,000	$50,000
	$200,000	$250,000

B. Gym to remain as is with replacement of the One Story Restrooms & Offices		
Roof	$125,000	$160,000
Miscellaneous	$175,000	$250,000
One Story Building Replacement	$750,000	$800,000
	$1,050,000	$1,210,000

C. Limited renovation of the Historic Gym with Replacement of the One Story Restrooms & Offices		
Roof	$175,000	$200,000
Windows	$85,000	$110,000
Miscellaneous	$250,000	$300,000
One Story Building Replacement	$750,000	$800,000
	$1,260,000	$1,410,000

D. Bring the Gym into Compliance with the 2010 FBC & FFPC, replace the One Story Restrooms & Offices		
Roof	$175,000	$200,000
Structural System	$900,000	$1,000,000
Windows	$85,000	$110,000
Miscellaneous	$450,000	$600,000
One Story Building Replacement	$750,000	$800,000
	$2,360,000	$2,710,000

MEETING NOTES
City of Key West – Frederick Douglass Gym
Task 'A' – Structural Assessment Overview Meeting
Project Number: 12.0D01
Date: July 19, 2013 8:30am

Attendees:
Bob Vitas, City Manager – COKW
Don Craig, Planning Director – COKW
David Fernandez, Asst. City Manager – COKW
Doug Bradshaw, Sr. Project Manager – COKW
Ron Wampler, Building Official – COKW
Andrew M. Hayes, AIA, LEED BD+C – h | c | b architects
Alec Smith, Assoc. AIA, LEED Green Assoc. – h | c | b architects

Items Discussed:

1. Review of Preliminary Report – Task 'A' Structural Analysis
    a. Overview – discussed the findings from the selective destructive testing and radar testing of the gym footings, columns, walls, slab & site.
    b. Steel reinforcing was found in the columns, header & sill of windows, footers, & bond beam at top of walls. No reinforcing was found in the current walls.
    c. A portion of the one story concrete roof section to be demolished cantilevers over the lobby space of the adjacent medical clinic building. The roof framing of the building to be demolished and the clinic are co-mingled and special care will have to be taken when removing.
    d. Also, some of the steel reinforcing of the one story section of roof is connected to the horizontal tie beam that is within the high-bay gym wall. Demolition of the roof beams will require bracing on the interior of the gym wall to prevent further damage due to over-flexure once the weight of the one story roof is removed.
    e. Four potential courses of action were discussed. Given that the building is a contributing structure in a historic district, Option C seemed the best fit to extend the life of the building and replace the existing one story section with new restrooms, lockers, office space, etc. This approach anticipates:
        i. removal of 30%-50 of the roof deck and structural roof augmentation with a new corrugated steel deck over the existing roof and steel angle supports along the entire roof perimeter. (Note; since this meeting we have learned that the existing roof framing with not support the weight of an additional deck. The current deck must be demolished and this cost can be absorbed within the $1.5M budget.
        ii. replacement of the existing windows and miscellaneous envelope upgrades

iii. construction of a one story addition to be separate from gym proper and to include office, restrooms, storage, locker spaces, etc.

f. Cost of Option C was discussed and a general assessment showed the construction cost would be around $1.5 million.

g. Schedule would include 9-12 months of design/bidding and 8-10 months of construction with a possible opening date during the late summer of 2015.

2. Suspension of Tasks 'B' & 'C'
   a. Due to the information obtained during Task 'A' further performance of Tasks 'B' & 'C' became moot and was suspended. There will be some minor actions that must be accomplished as part of a new Task Order such as completion of record drawings and Phase I Environmental survey among others.
   b. These actions are to be included in an Architectural design services Task Order to be provided next week.
3. Alternative Program Services Options During Construction
   a. Arrangements for other gym facilities off-site need to be made during the design phase in order to ensure the City can continue to offer the current range of recreational and after school services at an alternate location during the construction phase. Possible options to include:
      i. portable gym to be erected at a site to be determined
      ii. use of an existing gym at one of the current schools
      iii. use of existing gym at future Key West City Hall/Glenn Archer site
   b. This issue must be addressed up front with the public so expectations are managed.
4. Proceed to Design Task Order & Fee Proposal
   a. Discovery type actions listed above to be included
   b. Determination of the required program spaces to be included in the new one story addition will also be included.
   c. The new program will be determined prior to the start of design.
   d. Fee Proposal Task Order to be completed by the middle of week beginning 7/22/2013 and forwarded to City of Key West.
5. Presentation of Structural Assessment and Design Fee Proposal Task Order
   a. General presentation of Task 'A' - Structural Assessment to City Commission at August 6, 2013 general meeting.
   b. Approval of Design Fee Proposal Task Order at City Commission meeting on August 6, 2013.
6. Next meeting – August 6, 2013 6:00pm

*** Review above for accuracy and notify of any revisions within three (3) calendar days or minutes will be assumed to be accurate as issued.

APPENDIX A:

Soil Boring, Subsurface Interface Radar & Pachometer Exploration

REPORT OF
VISUAL STRUCTURAL INSPECTION,
SUBSURFACE INTERFACE RADAR SERVICES &
SUBSURFACE SOIL EXPLORATION WITH
STANDARD PENETRATION TEST BORINGS

PROJECT:

FREDERICK DOUGLASS RECREATION CENTER - BAHAMA VILLAGE
111 Olivia Street
Key West, Monroe County, Florida

JUNE 2013

Prepared for:

CONCRETE ANALYSIS & TESTING LABORATORIES, INC.
P. O. Box 500875
Marathon, Florida 33050

WINGERTER LABORATORIES, INC.
1820 N.E. 144th Street
North Miami, Florida 33181

WINGERTER
LABORATORIES INC.

Engineering Testing and Inspection Service
Established 1949

June 18, 2013

Concrete Analysis & Testing Laboratories, Inc.
Attention: Ms. Lisa Littlefield
P. O. Box 500875
Marathon, Florida 33050

Services: Visual Structural Inspection, Subsurface Interface Radar Services, and Subsurface Soil Exploration with Standard Penetration Test Borings
Project: Frederick Douglass Recreation Center - Bahama Village
Location: 111 Olivia Street, Key West, Monroe County, Florida
WLI Order No. 13-1194

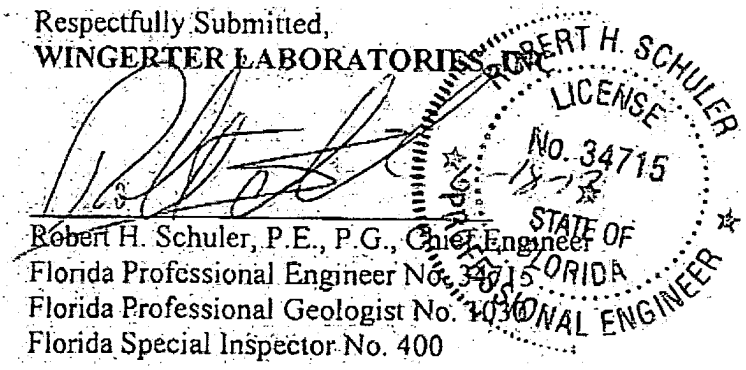
Ladies/Gentlemen:

We are pleased to present this report of our visual structural inspection, subsurface interface radar (SIR) services, and subsurface soil exploration with standard penetration test borings for the subject site. Also provided is our geotechnical engineering evaluation of subsurface conditions. These services were performed in general accordance with our Professional Service Agreement dated June 5, 2013. This report presents our field data together with our engineering evaluation for the restoration/renovation of the 50+ year old historical recreation center building.

This report was prepared in compliance with the 2010 Florida Building Code.

We appreciate this opportunity to be of service to you during this phase of the project. If you have any questions or comments regarding the information contained in this report, please contact the undersigned at 305-944-3401, extension 2 or at rhs@wingerterlab.com.

Respectfully Submitted,
WINGERTER LABORATORIES, INC.



Robert H. Schuler, P.E., P.G., Chief Engineer
Florida Professional Engineer No. 34715
Florida Professional Geologist No. 1036
Florida Special Inspector No. 400

In accordance with Rule 61G15-23.001 of The Florida Administrative Code, an original signature is hereby provided for the owner (or owner's representative) and the building official.

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INTRODUCTION

WINGERTER LABORATORIES, INC. (WLI) is pleased to present this report of our structural inspection, subsurface interface radar services, R meter tests and subsurface soil exploration with standard penetration test borings for the subject site. The purposes of this investigation were to obtain specific information regarding steel reinforcing present in the building's walls, columns and beams; determine beam reinforcing above the window openings and sill reinforcing below the window openings in the building's east and south walls; and advance two standard penetration test borings to determine recommended foundation design criteria.

In lieu of X-ray, we recommended utilizing the subsurface interface radar (SIR), also known as ground penetrating radar (GPR), to scan the east and south walls of the building to determine the reinforcing steel present in the walls, columns and beams. An R Meter was utilized as well. Our subsurface soil exploration consisted of a total of two Standard Penetration Test Borings performed to the depth of ten feet below land surface at the southwest and northeast exterior corner areas of the building, as shown in Appendix A of this report.

The following presents a review of the project information provided to us, our visual structural inspection at the site, SIR and R meter investigative scans findings, a discussion of the subsurface soil conditions, structural and geotechnical engineering evaluations as described above, and our Report of Test Boring Numbers B-1 and B-2.

PROJECT INFORMATION

Documents provided to us for our review and use include Sheets S-001 Foundation Plan & S101 Roof Framing Plan, prepared by Hayes Cumming Architects, P.A. of St. Petersburg, Florida in April 2013. Also, Mr. Alexander Smith of the firm met us on site. A man lift and operator were available for our use.

Our site inspection found the recreation center was originally a gymnasium building reportedly constructed in 1947. It is a concrete column and stucco covered block building with steel roof trusses.

For purposes of this report, columns are identified as F-1 through F-9 (building's southeast corner to northeast corner), for the east wall, and as A-1, B-1, etc. through F-1 (building's southwest corner to southeast corner), for the south wall. These two walls have high windows. The west wall of the gym building will remain, but the rectangular addition along the west side of the west wall, containing storage rooms and rest rooms/locker rooms, is scheduled for demolition. The north end of the building is improved with a performance stage. The main entrance is at the southwest corner; the other exit is near the northeast corner.

INVESTIGATIVE PROCEDURES

Subsurface Interface Radar System

Geophysical Survey Systems, Inc. Subsurface Interface Radar (SIR) System 20 was utilized with a 1.5 gigahertz antenna for shallow penetration. Profiling was accomplished by manually pushing the antenna across the surface areas to be scanned. This system could be considered the electromagnetic equivalent of a sonar submarine profiling system.

The transmitter produces a trigger pulse 98 times per foot. The receiving antenna detects pulses that are reflected from an interface in which the dielectric constant of the material changes. The receiver converts these electromagnetic (EM) signals to digital signals, which are then transmitted to the control unit for processing, and then displays on the screen. The depth of penetration of the electromagnetic (EM) pulse is dependent on the conductivity of the medium, since a high conductivity results in dispersion of the signal and less depth of penetration.

The screen display provides a continuous profile record corresponding to the interfaces one would see in the vertical wall of a trench cut along the line being surveyed. It is capable of indicating the strength of the reflections and detecting additional scatter which is useful in signal interpretation.

Pachometer

A James Instruments, Inc. rebar locator was utilized. This instrument is used to determine the location, depth and size of steel reinforcing bar in concrete, masonry brick and other construction materials. It may also be used for locating steel pipe, post tension cable, and conduit.

Standard Penetration Test Borings

Field work was performed using standard truck mounted drilling equipment. Soil samples (disturbed) were obtained in accordance with ASTM D-1586 utilizing a 2-foot long, 2-inch diameter split spoon sampler which is advanced by successive blows of a 140 pound hammer free-falling 30 inches. The number of blows for each six inches of penetration is recorded. The sum of the second and third blow counts for each 2-foot sampling interval constitutes the Standard Penetration Resistance in blows per foot, which is referred to as the "N" Value.

The Standard Penetration Test, "N" value curve shown on the boring logs indicates the general variation of the "N" value throughout the depth of the boring. This curve is plotted in a straight line which connects each "N" value. However, it should not be assumed that the changes in the "N" value are a linear function. The graphical representations shown on the boring logs should not be substituted for the actual material descriptions included in the logs.

Soil samples will be retained by **WLI** for a period of 30 days only unless specifically requested otherwise by the client.

Test borings were marked in the field by WLI personnel. Boring locations are, therefore, generally as shown on the provided site plan, but no degree of accuracy is stated or implied.

The following tables may be used in interpreting the consistency of the materials based on the "N" Value:

SOIL CONSISTENCY vs. "N VALUE"					
Cohesionless Soils		**Cohesive Soils**		**Rock and Gravels**	
"N Value" (blows/ft)	Consistency Designation	"N Value" (blows/ft)	Consistency Designation	"N Value" (blows/ft)	Consistency Designation
0 to 4	Very Loose	0 to 2	Very Soft	0 to 25	Loose or Soft
5 to 10	Loose	3 to 4	Soft	26 to 50	Medium Dense
11 to 30	Medium Dense	5 to 8	Medium	51 to 90	Dense
31 to 50	Dense	9 to 15	Stiff	-	-
50 or More	Very Dense	16 to 30	Very Stiff	-	-
-	-	31 or More	Hard	-	-

Elevations were not established for the test boring locations. Depths reported on the logs represent depths below ground surface as they existed on the date drilled. The client is cautioned that if subsequent filling or excavation of the site occurs, the reported depth must be so adjusted. **WLI** can not assume responsibility for the accuracy of reported depths if the site is disturbed subsequent to the date drilled.

TESTING PROGRAM AND CONDITIONS REVEALED

Our work was performed on site on June 6, 2013. Our work included a visual structural inspection. A subsurface interface radar survey was used to determine the reinforcing steel present in the walls, columns and beams. A James Instruments R meter was used to size the reinforcing steel. Rebar sizing by magnetic methods is not precise and can vary by one bar size for bars smaller than #6 and two bar sizes for bars #6 and above. Our subsurface soil exploration consisted of a total of two Standard Penetration Test Borings, conforming to the requirements of ASTM D 1586, performed to the depth of ten feet below land surface at the southwest and northeast exterior corner areas of the building, as shown in Appendix A of this report. The test boring locations are shown on the site plan provided in Appendix B of this report.

The discussions and evaluations contained in this report are based upon the conditions revealed in the referenced SIR scans, R meter readings and soil borings tests.

Subsurface Interface Radar Survey and R Meter Testing

The SIR survey, utilizing the 1.5 gigahertz antenna, included the south and east walls of the building interior and exterior. The R meter was also utilized on the same walls. We found that the square concrete columns are reinforced with four #9 bars with #3 ties at 12 inches on center.

The walls are formed of block with stucco on both sides. The block does not appear to be standard concrete masonry block, but has four circular voids per foot. We removed some loose stucco at a patched electrical box and exposed a small corner of the block. The block appears to be pyrobar block or a similar product. We have seen this block used in South Florida buildings to create fire rated interior walls. The block is generally four to five inches thick. We scanned the full length of the south wall, interior and exterior, and portions of the east interior wall, all below the windows, and did not find any reinforcing steel in the walls between the columns.

Scanning under the windows, we located a continuous concrete beam of eight to 12 inches high, with two #5 reinforcing steel bars and no ties. Above the windows, the beam varies between 12 to 18 inches in height, and is reinforced with four #5 reinforcing steel bars. We located only one tie, at about six inches away from the column.

Standard Penetration Test Borings

Boring Numbers B-1 and B-2 were installed to depths of ten feet below land surface, at the southwest and northeast exterior corner areas, locations shown in Appendix B. Test Boring No. B-1, located at the southwest exterior corner area, has medium dense surface layers of silty sand with trace fragmented limestone, followed by fragmented limestone with trace limesand to about four feet in depth. Very dense layers of fragmented limestone with some limesand were encountered to about eight feet in depth, followed by very dense layers of sand with some fragmented limestone to the maximum explored depth of ten feet. Test Boring No. B-2, located at the northeast exterior corner area, has medium dense surface layers of fragmented limestone with trace silty sand to about two feet in depth. Very dense layers of fragmented limestone with trace to equal amount silty sand, then fragmented limestone with trace limesand were encountered to the maximum explored depth of ten feet.

The ground water level at the time of our investigation was encountered at a depth of approximately three feet (3') below the existing land surface. Fluctuations in the ground water level should be expected due to seasonal climatic changes, tidal action, rainfall variation, surface runoff, construction activity and other site specific factors.

GEOTECHNICAL ENGINEERING EVALUATION

Evaluation of the subsurface data obtained from the test boring logs, using accepted geotechnical engineering criteria, indicates that the existing subsurface soil conditions can support spread footings founded directly on the virgin limestone on site.

The existing footings are on a hard cap rock limestone. The bearing capacity of this native limestone can be assumed to be 4,000 pounds per square foot.

SPECIAL REMARKS & ANNOTATIONS

In dealing with the unseen subsurface dimension, a prudent test boring program acts to identify the general range of conditions and to reduce, but not eliminate, the risks of unknown conditions. Therefore, **WLI** cannot offer a warrantee, expressed or implied, that materials or conditions other than those revealed in the test borings will not be encountered, nor that the relative proportions and density of the materials will not vary from those reported.

The objective of any geophysical survey is to define the existence and/or configuration of subsurface anomalies. However, these anomalies may bear a highly complex relationship to the geophysical measurements recorded. Therefore, those conclusions drawn, regardless of how logically supported, should not be misconstrued as fact.

Furthermore, **WLI** assumes no responsibility for the accuracy of the reported depths should any excavation, filling or alteration of the site grade occur, subsequent to the date of the drilling operation, without surveying the existing conditions.

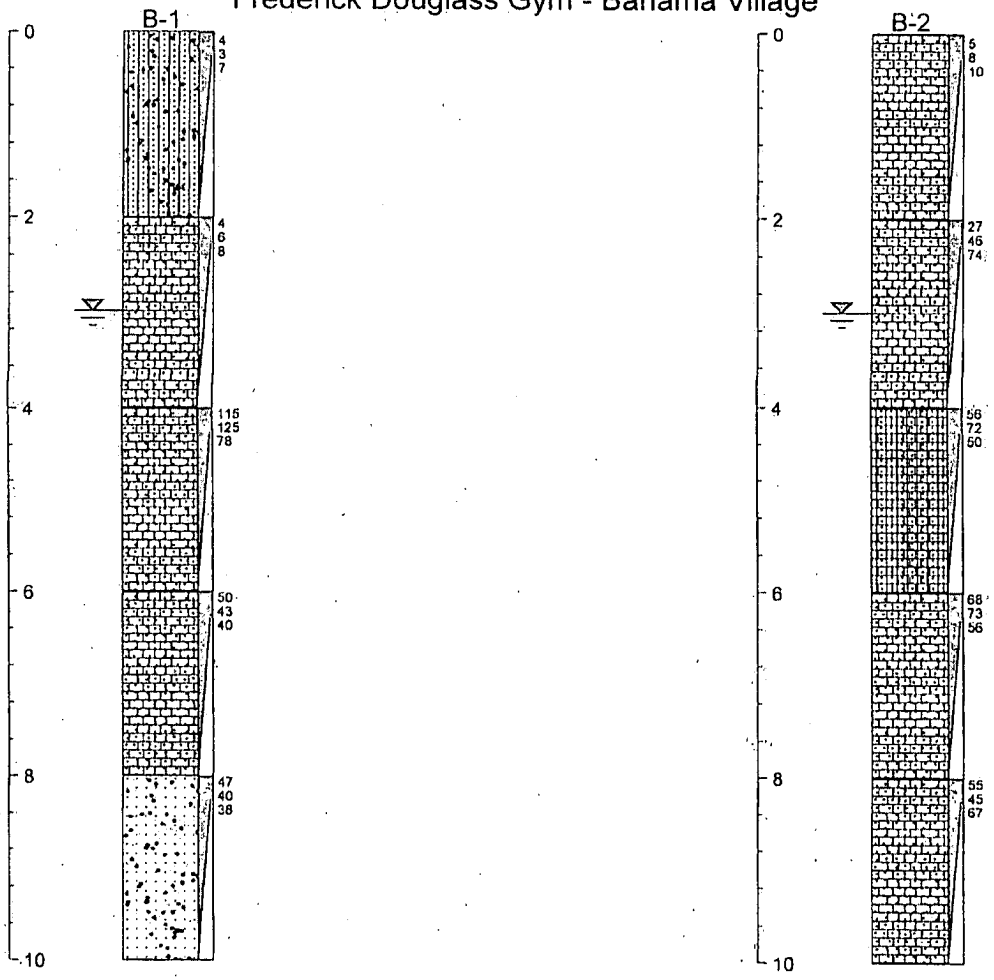
Also, since the criteria furnished to **WLI** constitutes our total knowledge and understanding of the project; inaccuracies, deviations or alterations of the criteria may invalidate these recommendations to the extent they impact the magnitude, distribution, and elevation of applied loads, or impact the nature of the construction.

APPENDIX A

TEST BORING LOGS

LOG OF BORINGS

Frederick Douglass Gym - Bahama Village



WINGERTER LABORATORIES INC.
Professional Engineering & Testing

LOG OF TEST BORING

BORING NO.: B-1

PROJECT: *Frederick Douglass Gym - Bahama Village*
CLIENT: *Concrete Analysis & Testing Laboratories, Inc.*
LOCATION: *111 Olivia Street, Key West Florida*
DRILLER: *JC*
DRILL RIG: *CMS*
DEPTH TO WATER> INITIAL *3.0 feet 3.0 feet*

PROJECT NO.: *13-1194*
DATE DRILLED: *6/06/2013*
ELEVATION: *existing*
LOGGED BY: *SC*

ELEVATION/ DEPTH	SOIL SYMBOLS, SAMPLERS AND TEST DATA	Description	STANDARD PENETRATION TEST SAMPLE NO.	DEPTH	N
0	4 3 7 7	Gray SILTY SAND with trace fragmented limestone	1	0.0-2.0	10
2	4 6 8 8	Tan FRAGMENTED LIMESTONE with trace limesand	2	2.0-4.0	14
4	115 125 78 78	Tan FRAGMENTED LIMESTONE with some limesand	3	4.0-6.0	203
6	50 43 40 40	Tan FRAGMENTED LIMESTONE with some limesand	4	6.0-8.0	83
8	47 40 38 38	Tan SAND with some fragmented limestone	5	8.0-10.0	78
10		Boring terminated at 10 feet below existing land surface.			
12					

N-Value Curve: 10 20 30 40 50 60

Near southwest exterior corner of building

This information pertains only to this boring and should not be interpreted as being indicitive of the site.

WINGERTER LABORATORIES, INC. 1820 N.E. 144th Street • North Miami, FL 33181
(305) 944-3401 1-800-345-SOIL

WINGERTER LABORATORIES INC.
Professional Engineering & Testing

LOG OF TEST BORING

BORING NO.: B-2

PROJECT: *Frederick Douglass Gym - Bahama Village*
CLIENT: *Concrete Analysis & Testing Laboratories, Inc.*
LOCATION: *111 Olivia Street, Key West Florida*
DRILLER: *JC*
DRILL RIG: *CMS*
DEPTH TO WATER> INITIAL *3.0 feet 3.0 feet*

PROJECT NO.: *13-1194*
DATE DRILLED: *6/06/2013*
ELEVATION: *existing*
LOGGED BY: *SC*

ELEVATION/ DEPTH	SOIL SYMBOLS, SAMPLERS AND TEST DATA	Description	STANDARD PENETRATION TEST SAMPLE NO.	DEPTH	N	N-Value Curve
0	5 8 10 10	Tan FRAGMENTED LIMESTONE with trace silty sand	1	0.0-2.0	18	
2	27 46 74 74	Tan FRAGMENTED LIMESTONE with trace silty sand	2	2.0-4.0	120	120
4	56 72 50 50	Tan FRAGMENTED LIMESTONE and SILTY SAND	3	4.0-6.0	122	122
6	68 73 56 56	Tan FRAGMENTED LIMESTONE with trace limesand	4	6.0-8.0	129	129
8	55 45 67 67	Tan FRAGMENTED LIMESTONE with trace limesand	5	8.0-10.0	112	112
10		Boring terminated at 10 feet below existing land surface.				
12						

N-Value Curve: 10 20 30 40 50 60

Near northeast exterior corner of building

This information pertains only to this boring and should not be interpreted as being indicitive of the site.

Figure

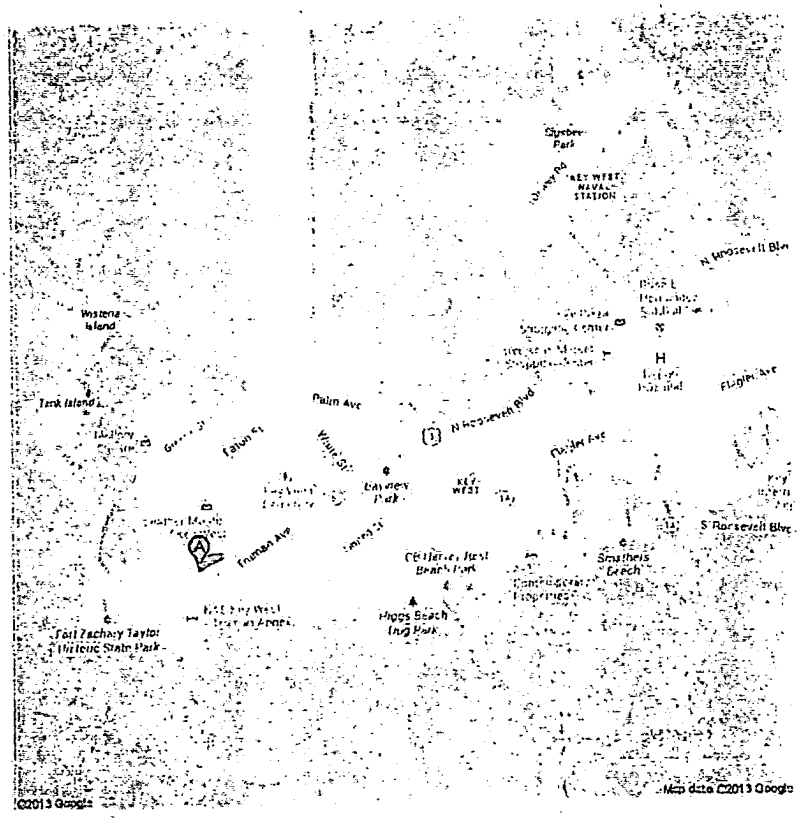
KEY TO SYMBOLS

Symbol	Description
Strata symbols	
	Silty sand with trace fragmented limestone
	Limestone with trace limesand
	Sand with trace fragmented limestone
	Fragmented limestone and silty sand
Misc. Symbols	
	Water table during drilling
Soil Samplers	
	Standard penetration test

APPENDIX B

TEST BORING LOCATION MAP

SITE LOCATION MAP



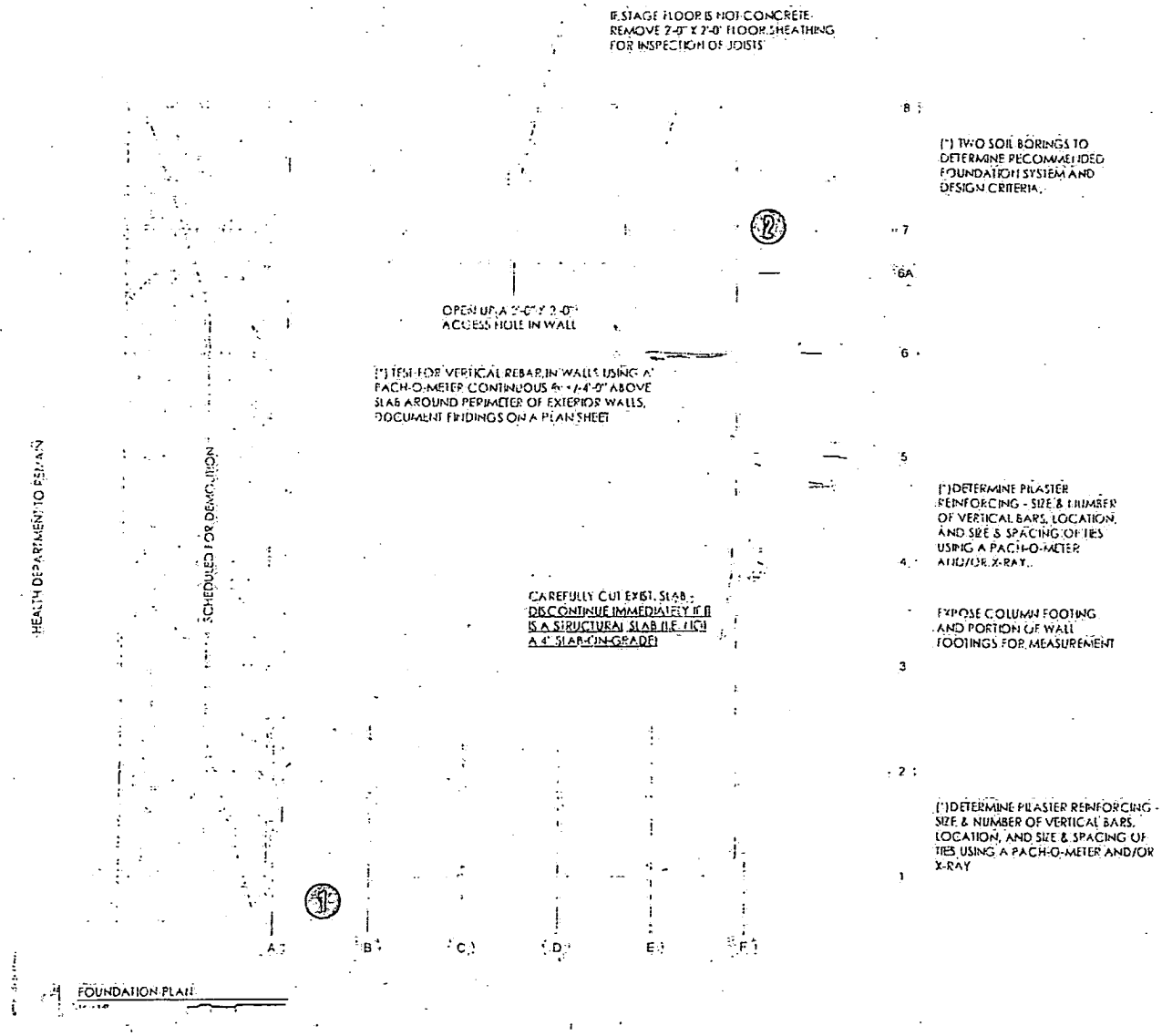
WINGERTER LABORATORIES INC.

Professional Engineering & Testing

1820 N.E. 144th Street, North Miami, Florida 33161

Concrete Analysis & Testing Laboratories, Inc.
Project: Frederick Douglass Recreation Center - Bahama Village
111 Olivia Street, Key West Florida
WLI Order No. 13-1194

TEST BORING LOCATION MAP



Test Boring Location

WINGERTER LABORATORIES INC.

Professional Engineering & Testing

1820 N.E. 144th Street, North Miami, Florida 33161

Concrete Analysis & Testing Laboratories, Inc.
Project: Frederick Douglass Recreation Center - Bahama Village
111 Olivia Street, Key West Florida
WLI Order No. 13-1194

APPENDIX B:

Cores & Compressive Strength Testing

Concrete Analysis & Testing Laboratories, Inc.
PO Box 500875
Marathon, FL 33050
305-743-5555 Office 305-743-0635 Fax
FDOT# 104014 & CMEC Certified

June 10, 2013

hoyes | cumming architects, pa
2210 Central Avenue, Suite 100
St. Petersburg, FL 33712

FREDERICK DOUGLASS RECREATION CENTER - Project #12.0D01

Column 4, Line F

The column is 14.5 inches X 16 inches and runs the height of the building. The pile cap is 66 inches X 60 inches and a depth of 11 inches. There were 3 test cores drilled and labeled 1, 2, and 3. Core #1 was drilled horizontally into the column to a depth of 12 inches, a #3 hoop was found at a height of 15 inches above the top of the pile cap.

Core #1 and Core #2 were drilled from the pile cap. Core #1 was drilled the entire depth of the pile cap. It's length was 11 inches with 2-#5 rebars one located at 1.5 inches from the bottom of the pile cap and the other was 2.5 inches from the bottom of the pile cap. Core #2 was drilled the entire depth of the pile cap. It's length was 9 inches with 1-#5 rebar located at the very bottom of the pile cap.

The concrete floor was 5 inches in thickness with no vapor barrier found, and reinforcement was wire mesh 6 inches X 6 inches #10. There was no void between the concrete and limerock fill material. The concrete floor was not connected or tied to the pile cap (non structural).

The grade beam is 16 inches wide and the depth varied +/-16 inches. It was placed directly on top of the solid limerock strata. There is no indication of settling, but it appears some areas have a high chloride content.

Attachments:

- Chloride Content Report
- Compressive Strength Report Cores #1, #2, and #3
- Pile Cap and Column Diagram (Core Locations)

Respectfully Submitted,

William L Mathews
Laboratory Manager

REPORT OF CORED CYLINDER TEST

Concrete Analysis & Testing Laboratories, Inc
PO Box 500875 Marathon, FL 33050

Report Date: 6/17/13

Project Number: Frederick Douglass Rec Center Report Number: 1
Project: Frederick Douglass Recreation Center, Key West, FL
Client: Hayes/Cumming Architects, PA
Address: 2210 Central Avenue, Suite 100
St. Petersburg, FL 33712
Attn: Alexander Smith

SAMPLING INFORMATION (ASTM C 42)

Date Sampled: 6/6/2013 Time Sampled: NA

Technician: WLM

Date Placed:

Location of Sample: See Cover Letter

Supplier: NA

Mix Number: NA

Design Strength: NA

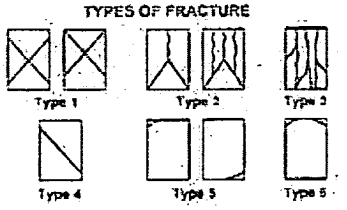
LABORATORY TEST RESULTS (ASTM C 39)

Specimen	Test Date	Age	Load	Diameter	Area	Un-capped Height	Capped Height	Strength	Percent of Design	Type of Fracture
A			7055	1.72	2.32	3.98		3040		3
B			9540	1.72	2.32	3.98		4110		3

Remarks: Cores Prepared to Length & Planeness Perpendicularity.

Age: +/- 30 years

Copies to:



Reported by: William Mathews
Concrete Laboratory Supervisor

REPORT OF CORED CYLINDER TEST

Concrete Analysis & Testing Laboratories, Inc
PO Box 500875 Marathon, FL 33050

Report Date: 6/17/13

Project Number: Frederick Douglass Rec Center Report Number: 2
Project: Frederick Douglass Recreation Center, Key West, FL
Client: Hayes/Cumming Architects, PA
Address: 2210 Central Avenue, Suite 100
St. Petersburg, FL 33712
Attn: Alexander Smith

SAMPLING INFORMATION (ASTM C 42)

Date Sampled: 6/6/2013 Time Sampled: NA

Technician: WLM

Date Placed:

Location of Sample: See Cover Letter

Supplier: NA

Mix Number: NA

Design Strength: NA

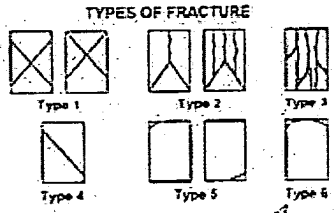
LABORATORY TEST RESULTS (ASTM C 39)

Specimen	Test Date	Age	Load	Diameter	Area	Un-capped Height	Capped Height	Strength	Percent of Design	Type of Fracture
A			8590	1.72	2.32	3.98		3700		3
B			9130	1.72	2.32	3.98		3940		3

Remarks: Cores Prepared to Length & Planeness Perpendicularity.

Age: +/- 30 years

Copies to:



Reported by: _____

William Mathews
Concrete Laboratory Supervisor

REPORT OF CORED CYLINDER TEST

Concrete Analysis & Testing Laboratories, Inc
PO Box 500875 Marathon, FL 33050

Report Date: 6/17/13

Project Number: Frederick Douglass Rec Center Report Number: 3
Project: Frederick Douglass Recreation Center, Key West, FL
Client: Hayes/Cumming Architects, PA
Address: 2210 Central Avenue, Suite 100
St. Petersburg, FL 33712
Attn: Alexander Smith

SAMPLING INFORMATION (ASTM C 42)

Date Sampled: 6/6/2013 Time Sampled: NA

Technician: WLM

Date Placed:

Location of Sample: See Cover Letter

Supplier: NA

Mix Number: NA

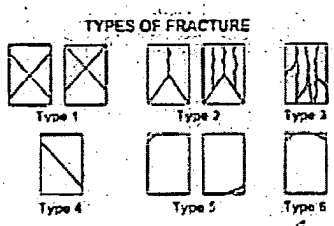
Design Strength: NA

LABORATORY TEST RESULTS (ASTM C 39)

Specimen	Test Date	Age	Load	Diameter	Area	Un-capped Height	Capped Height	Strength	Percent of Design	Type of Fracture
A			4665	1.72	2.32	3.98		2010		3
B			5170	1.72	2.32	3.98		2230		3

Remarks: Cores Prepared to Length & Planeness
Perpendicularity.
NOTE:Air Voids During Placement(Lack of Vibrating)
Age: +/- 30 years

Copies to:

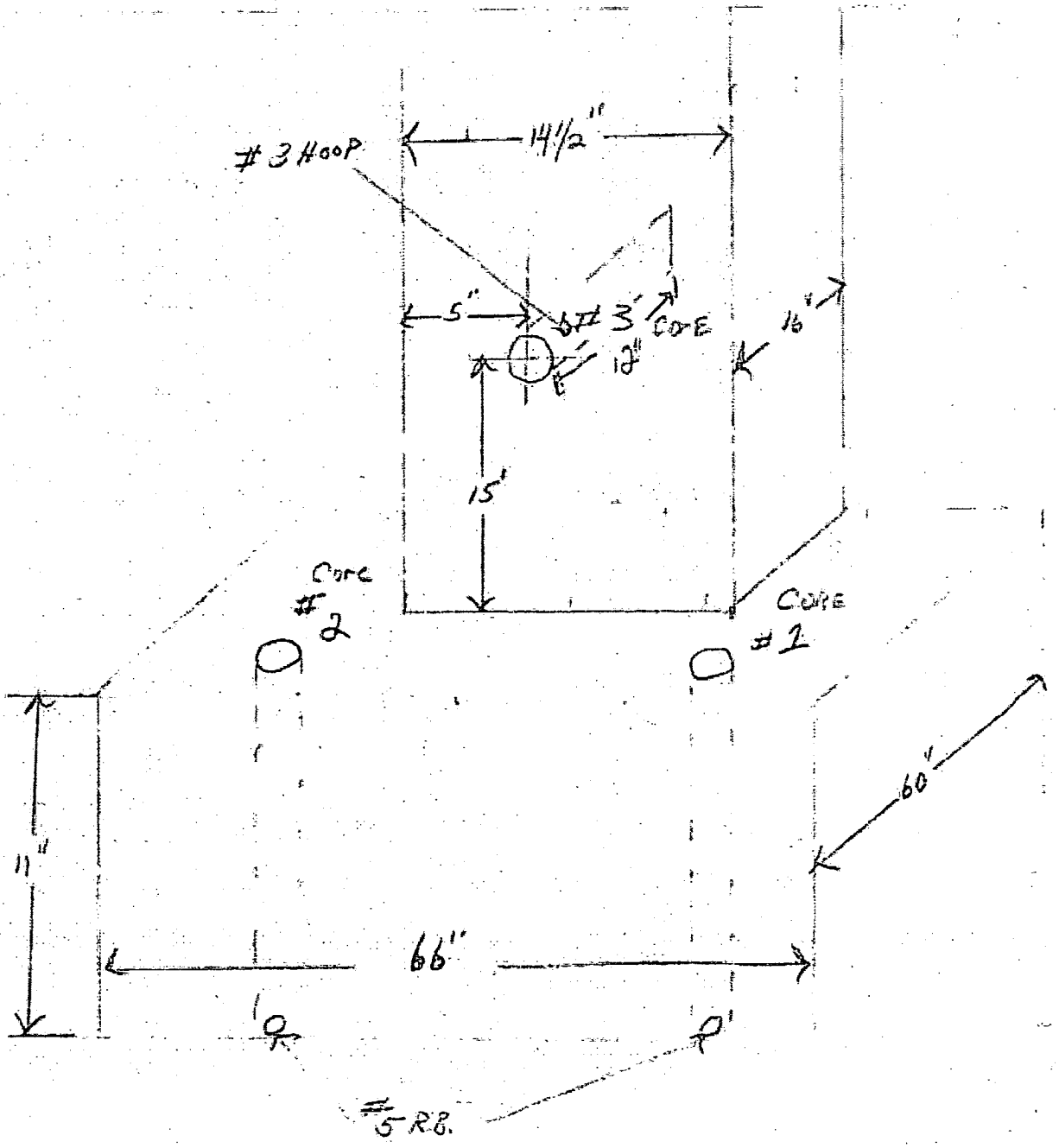


Reported by:

William Mathews
Concrete Laboratory Supervisor

Concrete Analysis & Testing Laboratories, Inc.

PO Box 500875
Marathon, FL 33050
305-743-5555 Office 305-743-0635 Fax
FDOT# 104014 & CMEC Certified



FREDERICK DOUGLAS RECREATION BUILDING

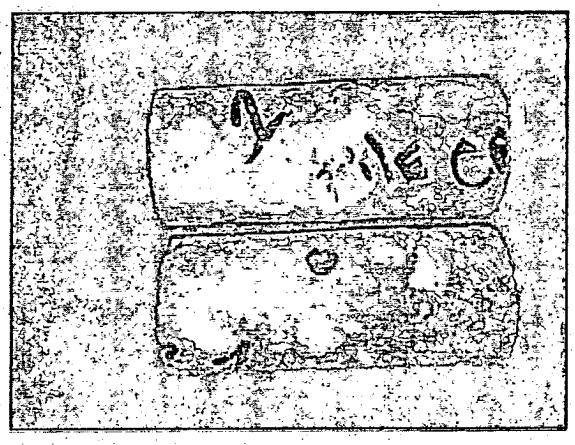
LIFT F
COLUMN 4

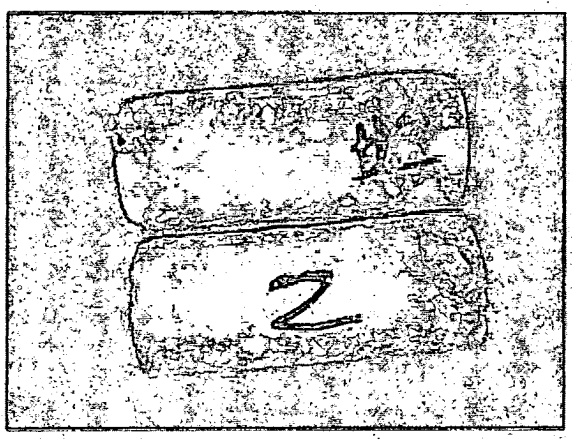
Concrete Analysis & Testing Laboratories, Inc.

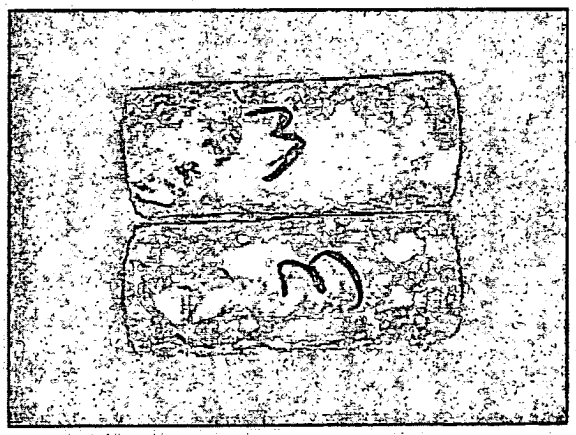
PO Box 500875
Marathon, FL 33050
305-743-5555 Office 305-743-0635 Fax
FDOT# 104014 & CMEC Certified

June 10, 2013

FREDERICK DOUGLASS RECREATION CENTER - Project #12.0D01







Respectfully Submitted,

William L Mathews
Laboratory Manager

APPENDIX C:

Structural Assessment & Design for Compliance with 2010 FBC

McCarthy and Associates, Inc.
CONSULTING•ENGINEERS

FREDERICK DOUGLAS RECREATION CENTER

Building Location:
111 Olivia Street
Key West, Florida

Limited Structural Assessment
Task A
McCarthy Project No.13178

Prepared by:
McCarthy and Associates, Inc.

July 8, 2013

McCarthy and Associates, Inc.
CONSULTING • ENGINEERS

2555 Nursery Road, Suite 101
Clearwater, FL 33764
Phone: (727) 536-8772
Fax: (727) 538-9125
www.mccarthyassoc.com

July 8, 2013

Mr. Andrew Hayes
Hayes/Cumming Architects P.A.
2210 Central Avenue, Suite 100
St. Petersburg, FL 33712

Re: Frederick Douglas Recreation Center
Limited Structural Assessment – Task A
111 Olivia Street
Key West, Florida
McCarthy Project No. 13178

Dear Andy:

At your request, we have completed Task A which includes an on-site structural analysis and structural evaluation. An assessment report is enclosed.

Sincerely,
McCarthy and Associates, Inc.

E. M. McCarthy

E. Michael McCarthy, P.E.
President

Enclosure: Assessment Report

TABLE OF CONTENTS

Frederick Douglas Recreation Center
Limited Structural Assessment - Task A
McCarthy Project No. 13178

A. Background:

The Frederick Douglas Recreation Center was originally built in the 1950's with a subsequent addition and renovations at a later date. The scope of this project is limited to the original 1950's gymnasium section. The adjacent health department and single story area containing offices, restrooms, kitchen, and entry canopy are not included. The single story area on the south side of the gymnasium was evaluated under a separate project and is currently reinforced with temporary shoring.

B. Task and Scope:

1. Specify on-site testing (exploratory demolition, and repair will be performed by a contractor).
2. Review readily accessible areas of the building to evaluate its structural integrity.
3. Review testing results.
4. Identify structural concerns and deficiencies.
5. Document the existing structural system for use in analysis.
6. Analyze the building to determine compliance with 2010 Florida Building Code (FBC).
7. Recommend repairs needed to restore the building to its original condition.
8. Recommend upgrades needed to meet the 2010 FBC.
9. Prepare a structural assessment report.
10. Meet with City officials and Hayes/Cumming in Key West to answer questions.

C. Limitations:

Information for this structural assessment was obtained solely from visual observations at the site and the results from on-site testing and exploratory demolition. The testing and exploratory demolition reports are not included in this report but may be obtained separately. The original construction documents were not available. Additionally, non-structural engineering services and flood analysis were not included in our scope of services.

D. Description:

The gymnasium is a single story facility with an elevated stage and moveable bleachers. Please refer to the attached photographs. The roof appears to be constructed with fiberboard on bulb tees. Typically, there is poured gypsum on top of the fiberboard and the bulb tees are welded to the supporting joists. This was a common roof system in the 1950's. The bulb tees are supported

by steel bar joists which in turn are supported by steel girder trusses. The girder trusses bear on concrete columns. The exterior walls consist of 4 – 5" thick unreinforced masonry with concrete beams at the roof and above and below the horizontal windows. The ground floor slab is 5" thick concrete and reinforced with welded wire fabric. The slab bears on grade without a vapor barrier. The foundations for both columns and load-bearing walls are conventional concrete spread footings bearing directly on the lime rock strata below. The building appears to have been designed for wind loads in the longitudinal directions using two horizontal "trusses" to carry forces to the exterior walls. Wind loads in the transverse direction are transferred to the concrete columns by moment-resisting end connections.

The gymnasium appears to be well maintained considering its age and no significant structural deficiencies or concerns were found.

E. Current Code Analysis:

The current building code in effect is the 2010 Florida Building Code (FBC) as adopted by the Code of Ordinances City of Key West. The unimproved existing building does not need to comply with the current code but the City may voluntarily upgrade all or a portion of the building to meet the current code. Specifically, structural loading requirements for this building under the 2010 FBC include:

1. Roof live load = 20 psf
2. Ultimate basic wind speed = 200 mph (3 sec gust)
3. Equivalent nominal basic wind speed = 155 mph (3 sec gust)
4. Risk Category = III
5. Exposure Category = C
6. Enclosed building internal pressure coefficient = +/- 0.18
7. Wind born debris region

The results of our analysis indicate the roof deck, lateral wind resisting system, steel joists, steel girder trusses, and exterior walls would have to be reinforced in order to meet the 2010 FBC. Specific structural upgrades are listed below and shown graphically on the attached plans:

1. Remove the existing roof and install new metal decking, insulation, and roofing.
2. Cut free the bottom chord connection to the concrete column at each end of each girder truss.
3. Reinforced specific web members at each girder truss.

4. Install new steel beams and columns inside all exterior walls.
5. A generous contingency should be included to account for unforeseen conditions.

F. Summary:

We found the gymnasium portion of the existing building to be in fairly good condition considering its age. No significant structural concerns, such as cracking, deflections, deterioration were found. The unimproved building does not need to meet the current 2010 FBC but may be all or partially reinforced to comply on a voluntary basis. Specific structural upgrades are recommended herein.

G. Attachments:

1. Photographs
2. Foundation Plan
3. Roof Framing Plan

Frederick Douglas Recreation Center – Photographs
Limited Structural Assessment – Task A
McCarthy Project No. 13178

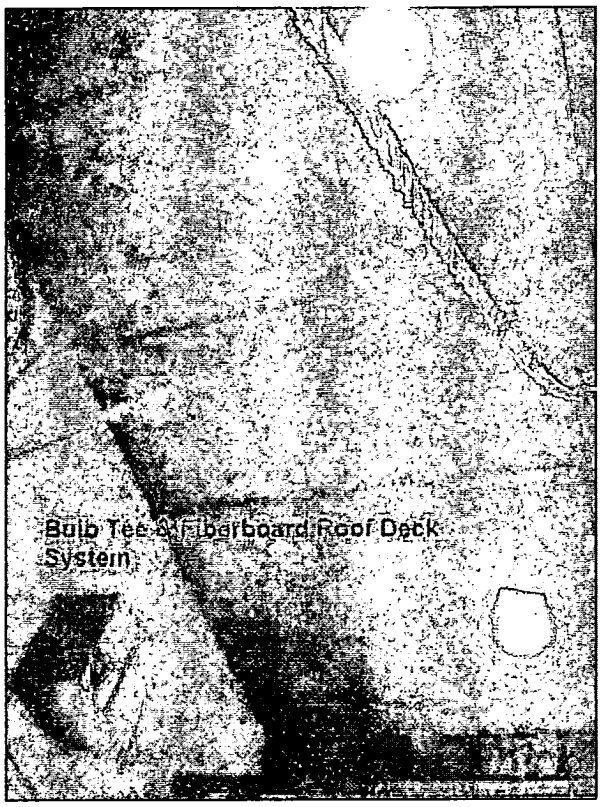
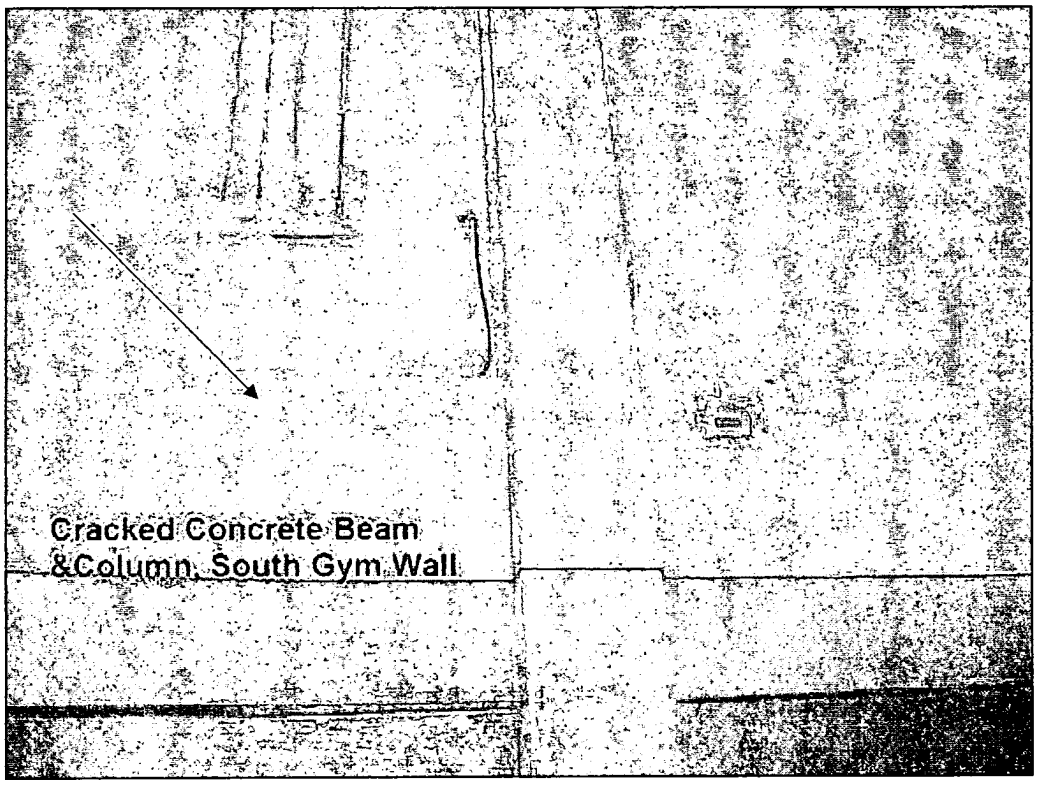


Photo #01

Photo #02

Frederick Douglas Recreation Center – Photographs
Limited Structural Assessment – Task A
McCarthy Project No. 13178



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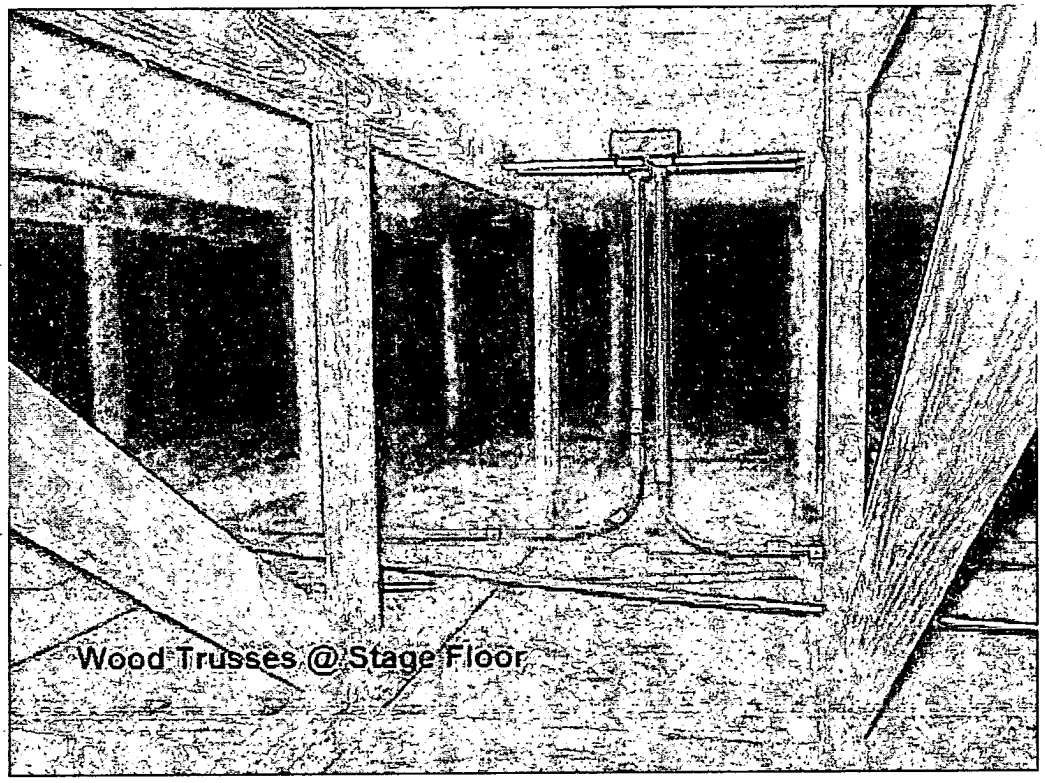


Photo #04

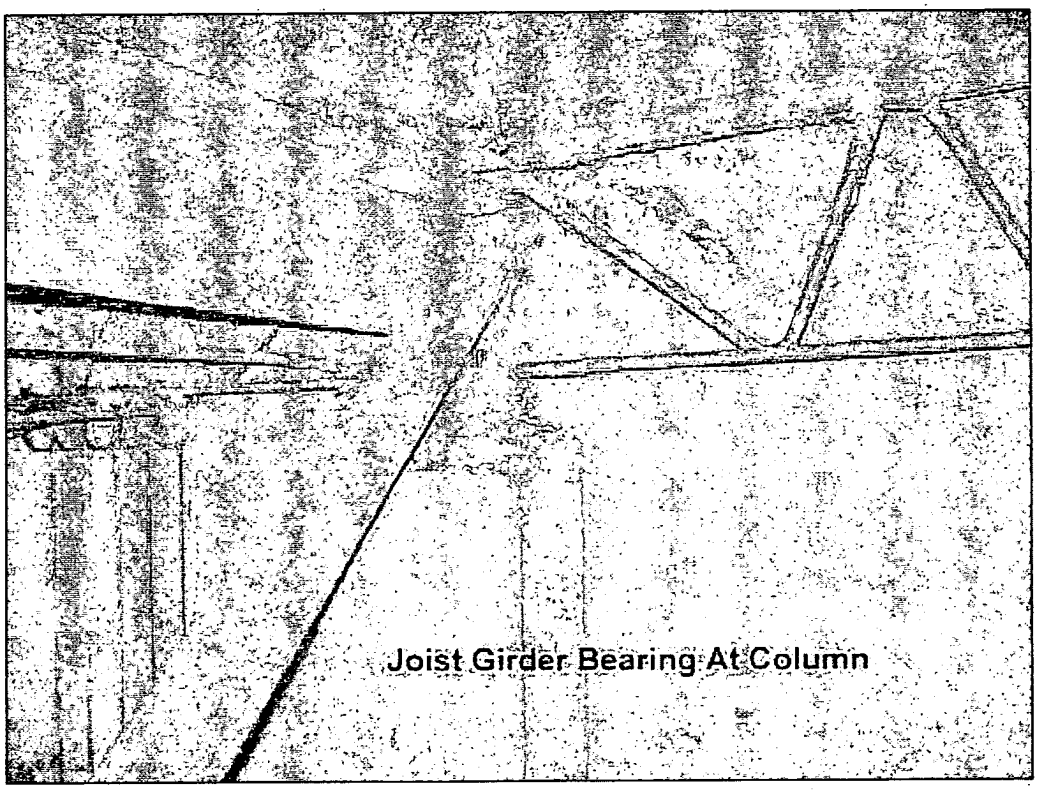


Photo #05

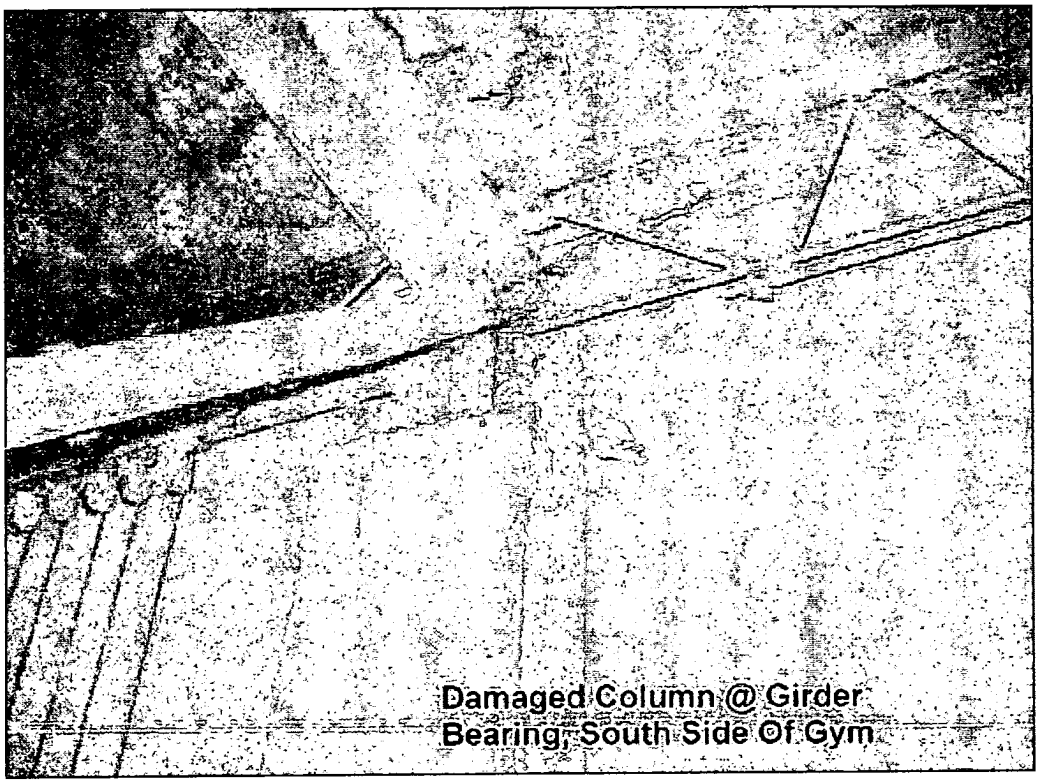


Photo #06

Frederick Douglas Recreation Center – Photographs
Limited Structural Assessment – Task A
McCarthy Project No. 13178

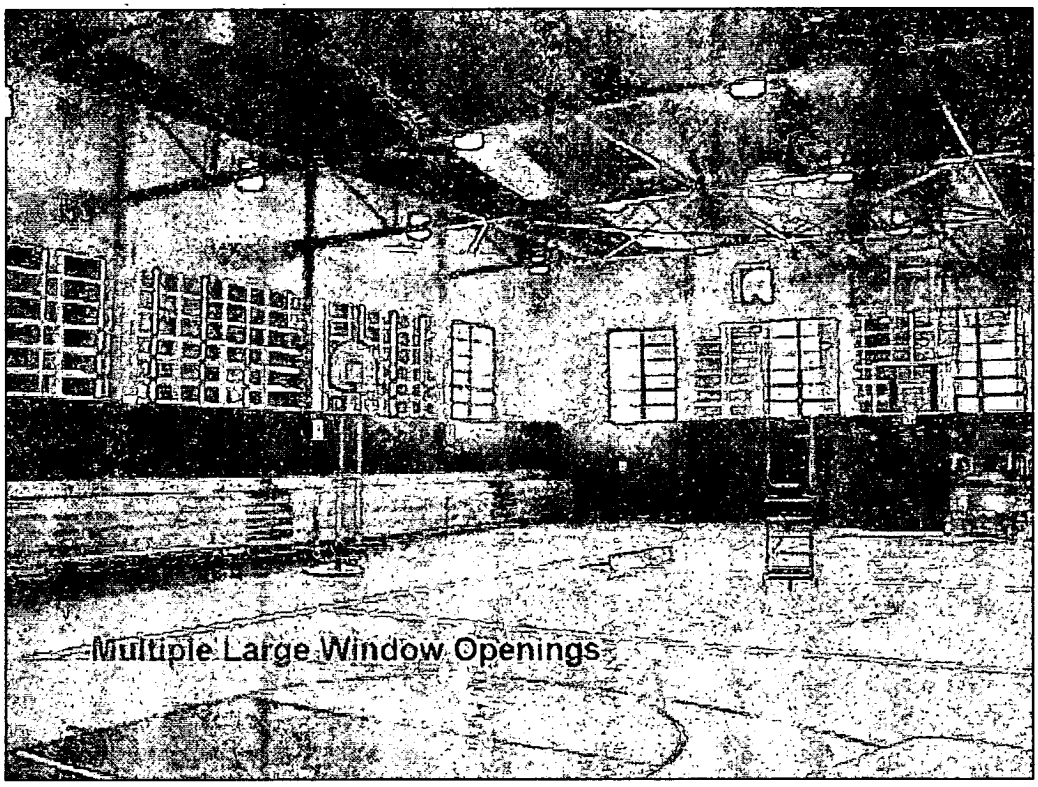


Photo #07

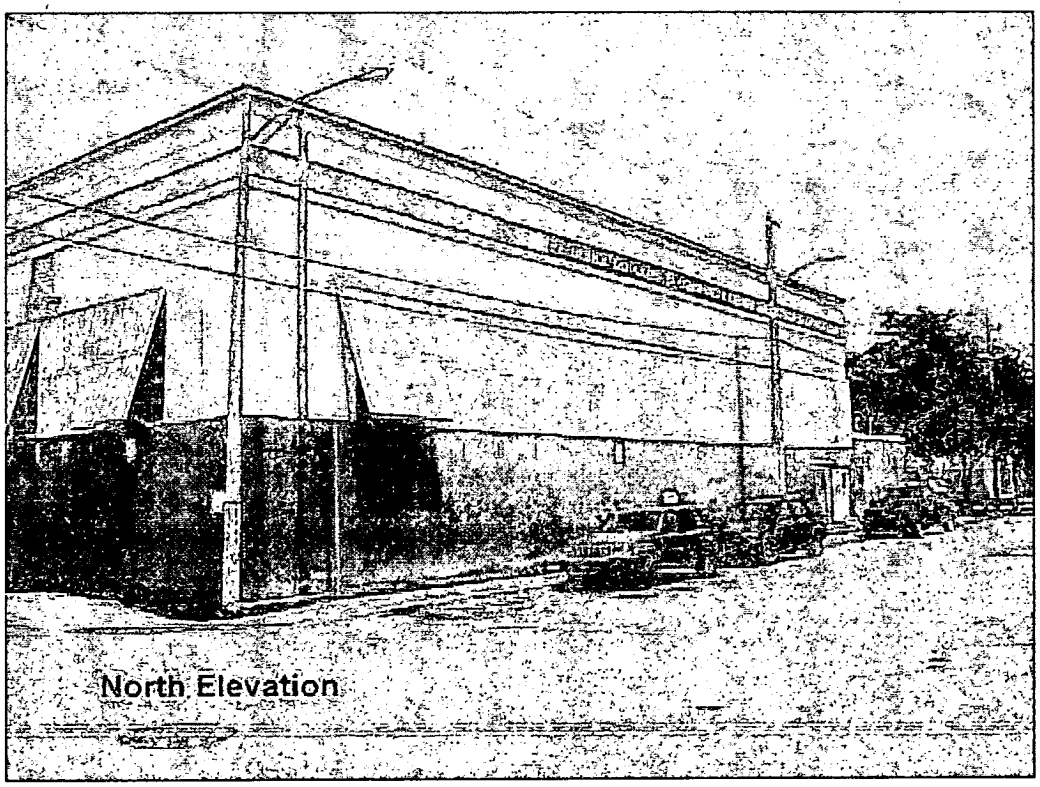
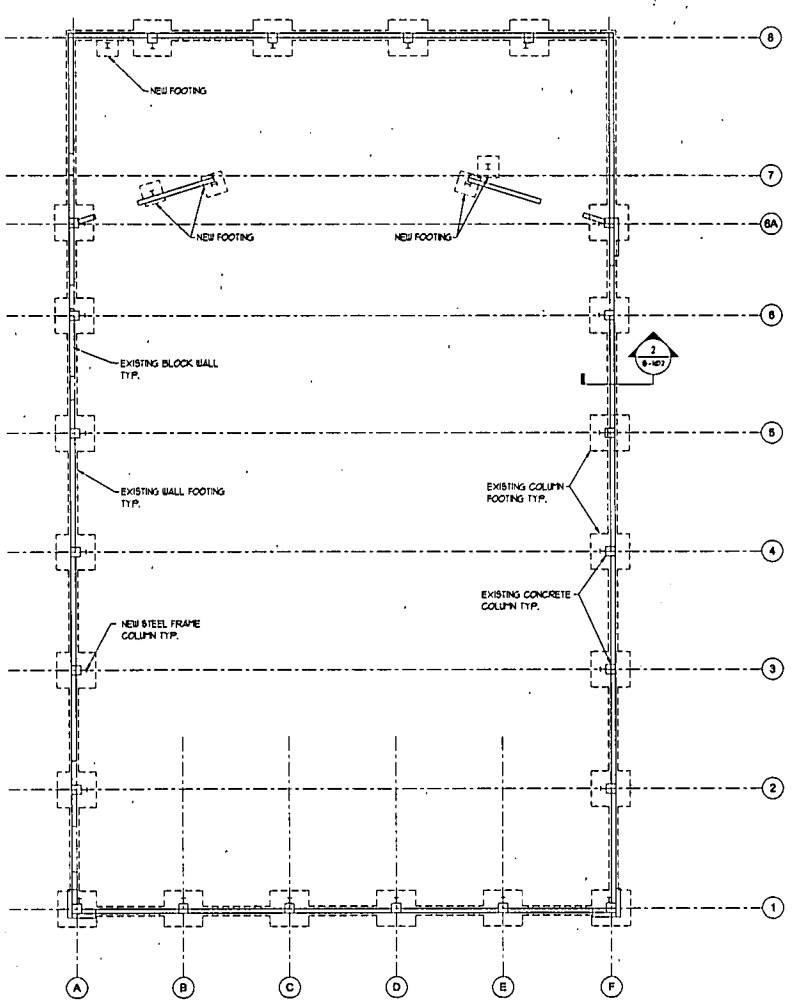


Photo #08

Frederick Douglas Recreation Center – Photographs
Limited Structural Assessment – Task A
McCarthy Project No. 13178

Photo #09



EXISTING FOUNDATION PLAN

SCALE: 1/8" = 1'-0"

DESIGN CRITERIA:

2010 FLORIDA BUILDING CODE

GRAVITY DESIGN LOADS:

	SUPERIMPOSED	TOTAL
AREA	LIVE LOAD	DEAD LOAD
ROOF	20 PSF	15 PSF

WIND DESIGN CRITERIA:
- ULTIMATE BASIC WIND SPEED: VULT = 200 MPH (3 SECOND GUST)
- EQUIVALENT NOMINAL BASIC WIND SPEED VASD = 155 MPH (3 SECOND GUST)
- RISK CATEGORY = III
- EXPOSURE CATEGORY = C
- ENCLOSED BUILDING INTERNAL PRESSURE COEFFICIENT, GCPI = +/-0.18
- WIND BORNE DEBRIS REGION

FOUNDATION PLAN NOTES:

ACCORDING TO THE VISUAL STRUCTURAL INSPECTION REPORT BY WAGERTER DATED JUNE 18, 2013 AND THE MATERIAL TESTING PERFORMED BY CONCRETE ANALYSIS & TESTING LABORATORIES, INC. DATED JUNE 19, 2013, THE FOLLOWING INFORMATION WAS PROVIDED FOR THE EXISTING STRUCTURE.

1. SOIL BEARING PRESSURE = 4000 PSF
2. EXISTING CONCRETE COLUMNS: 14½"x16" (2010 PSI) W/ (4) #9 VERT. BARS & #3 @ 12" O.C.
3. EXISTING CONCRETE COLUMN FOOTINGS: 5'-6"x5'-0"x1'-11" W/ #5 REBAR @ BOTTOM OF FOOTING.
4. EXISTING WALL FOOTINGS: 1'-4" WIDE x 1'-4" DEEP CONTINUOUS FOOTING.
5. EXISTING CONCRETE SLAB-ON-GRADE: 5" THICK SLAB W/ 6"x6" #0 WIRE MESH.
6. EXISTING BLOCK WALLS: 4"-8" THICK BLOCK WALL W/ NO VERTICAL REINFORCING.
7. CONCRETE BEAMS ABOVE WINDOWS: 12"-16" IN HEIGHT W/ (4) #5 BARS CONT. & NO STIRRUPS.
8. CONCRETE BEAMS BELOW WINDOWS: 8"-12" IN HEIGHT W/ (2) #5 BARS CONT. & NO STIRRUPS.

GROSS ULTIMATE WIND LOADS MAIN ROOF
ROOFING MATERIALS

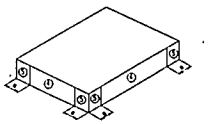
COMPONENTS AND CLADDING	ROOF ZONE		
	1	2	3
PRESSURE (psf)	41.3	41.3	41.3
SUCTION (psf)	-101.6	-170.5	-256.6

NET ULTIMATE WIND LOADS MAIN ROOF
JOISTS OR TRUSSES

COMPONENTS AND CLADDING	ROOF ZONE		
	1	2	3
PRESSURE (psf)	33.6	33.6	33.6
SUCTION (psf)	-93.8	-84.5	-170.5

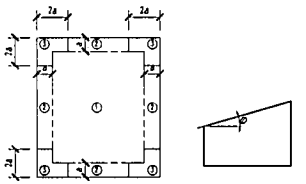
ULTIMATE WIND PRESSURES (PSF)
EXTERIOR DOORS, WINDOWS, WALLS

EFFECTIVE AREA (ft²)	ZONE 4		ZONE 5	
	PRESSURE	SUCTION	PRESSURE	SUCTION
1 TO 20	93.0	-100.1	93.0	-124.0
21 TO 50	86.1	-96.4	86.1	-119.4
51 TO 100	83.5	-91.3	83.5	-105.0
101 TO 150	79.2	-87.0	79.2	-96.4
151 TO 250	76.6	-84.4	76.6	-93.1
251 TO 500	74.0	-81.8	74.0	-86.1
501 + ABOVE	69.1	-77.5	69.1	-77.5



DOORS, WINDOWS AND WALLS

1. a = 15 FT
2. THIS BUILDING IS DESIGNED AS AN ENCLOSED STRUCTURE. ALL EXTERIOR COMPONENTS (DOORS, WINDOWS, ETC.) MUST BE DESIGNED TO WITHSTAND THE WIND LOADINGS SPECIFIED FOR THE DESIGN OF COMPONENTS AND CLADDING IN THE TABLES. IN ADDITION, ALL AREAS OF EXTERIOR GLAZING MUST BE CERTIFIED FOR MISSILE IMPACT OR PROTECTED BY WIND-BORNE DEBRIS BY A SCREEN BARRIER.
3. TO CONVERT THE (ASCE 7-10) ULTIMATE WIND PRESSURES IN THE TABLES ABOVE TO (ASD) WIND PRESSURES, MULTIPLY EACH VALUE BY 0.6.



FLAT ROOF (0°≤ 3°)

COMPONENT AND CLADDING LOADING DIAGRAMS

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CLIENT / PROJECT NAME:

FREDERICK DOUGLASS RECREATION CENTER STRUCTURAL ASSESSMENT TASK A

111 OLIVIA STREET
KEY WEST, FLORIDA

Original drawing is 24"x36". Scale accordingly if reduced.

SHEET TITLE:

EXISTING FOUNDATION PLAN WITH UPGRADES TO 2010 FBC

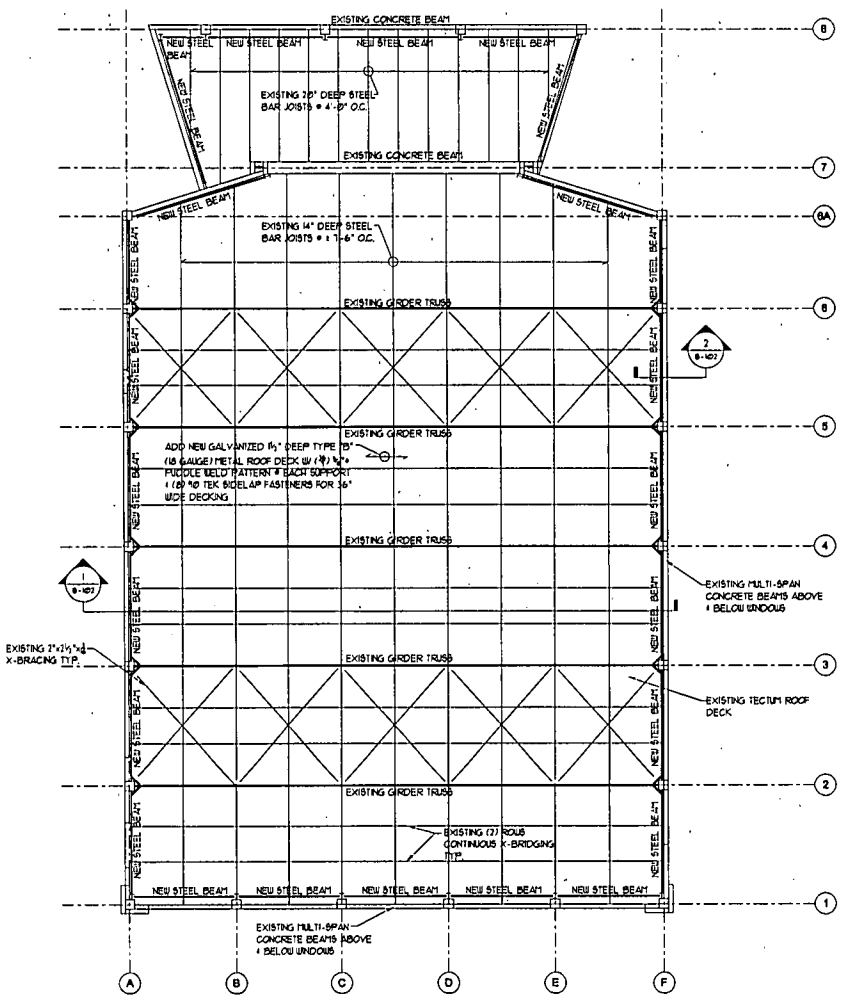
REVISIONS:

DATE ISSUED: JULY 08, 2013
PROJECT NO.: 12.0001

DRAWING NUMBER:

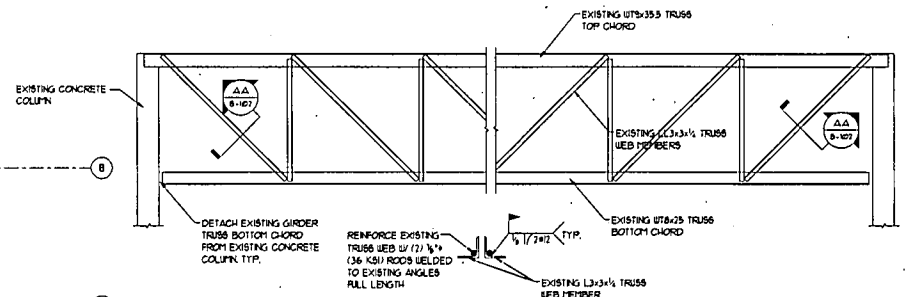
S-101 SHEET: OF 2

NOT FOR CONSTRUCTION- NOT FOR FINAL PRICING- SUBJECT TO CHANGE



EXISTING ROOF FRAMING PLAN

SCALE: ⅛" = 1'-0"

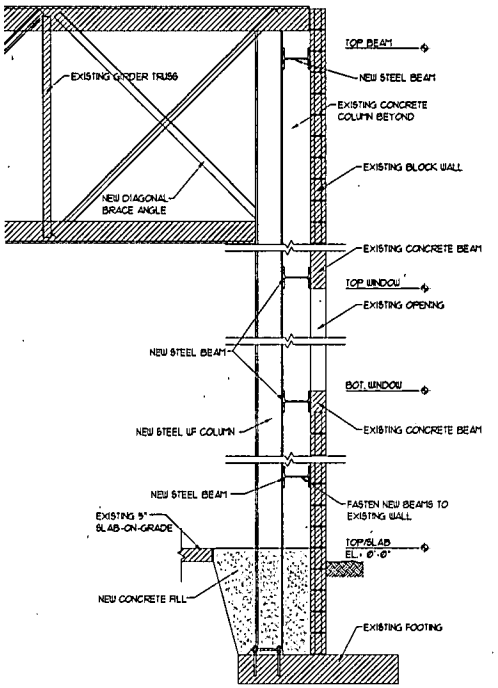


ADDITIONAL WEB REINFORCING

AA

EXISTING GIRDER TRUSS

1



NEW STEEL FRAME

2

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STRUCTURAL ASSESSMENT
TASK A
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SHEET TITLE:
EXISTING ROOF FRAMING PLAN WITH UPGRADES TO 2010 FBC

REVISIONS:

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DATE ISSUED: JULY 08, 2013
PROJECT NO.: 12.0001

DRAWING NUMBER:
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01-07-2013 NH