INSULAR ABC 'S INITIATIVE
DEFERRED MAINTENANCE REDUCTION PROGRAM
St. Thomas / St. John School District
Monday, December 7, 2015

REQUEST FOR PROPOSAL FOR STRUCTURAL DESIGN SERVICES

DMRP-RFP – STTJ-003; STRUCURAL DESIGN FOR CHARLOTTE AMALIE HIGH SCHOOLS

To engage and retain a locally licensed Structural Engineer to thoroughly Investigate, Document, Develop and Prepare Design & Construction Documents and Specifications to address the structural deficiencies and conditions at the **Charlotte Amalie High School** as identified and cited in the Insular ABC's Initiative Phase III Task Findings and Recommendations prepared by Martin & Chock, Inc. in the Structural Summary Report dated October 2015:

Specifically the structural design shall include the following buildings and conditions:

Charlotte Amalie High School: Building No. 11-B-2 - Slab Only- Floor
Charlotte Amalie High School: Building No. 20- Cottage - CIP Column-Floor
Charlotte Amalie High School: Building No. 30-S-1, S-2 – Long Span Rigid Frames
Charlotte Amalie High School: Building No. 35 – Covered Walkways

These facilities have been cited with a range of structural and non-structural deficiencies classified as posing a high Critical Health and Safety Risk to all of the facility's occupants and users. The objective is to eliminate all such structural deficiencies and risk at currently in these structures.

1. The selected licensed structural engineer (individual or firm) shall document all field conditions, surveys, design all concrete repair details, design all pre-stressing tendon repair details and prepare all project required specifications.

2. The selected individual or firm shall be responsible to perform limited Contract Administrative Services as it pertains to the review, inspection and certification of all work performed for compliance and conformance with the approved project design and specifications documents.

3. The selected individual or firm shall perform all further and necessary investigative work to determine the total extent of the structural deficiencies as highlighted in the above cited Structural Summary Report but shall not rely only upon that document as the only basis for developing the requisite design and construction specifications for the project.

4. Provide a draft set of project design and specifications documents for the owner's review and input prior to completion of the work effort.

5. Attached hereto please find a copy of all relevant and pertinent Owner Exhibits associated with these buildings and facilities, including but not limited to Photographs, Report Excerpts, Preliminary Scopes of Work, Etc..

6. Furnish ten (10) Complete Sets of all final Project Design & Specifications Documents

7. Proposer shall itemize all cost contemplated with each of the schools and buildings as itemized above.

8. Engineer's proposals shall include provisions For Photographic Record and Documentation of conditions Before, During and After construction; Periodic Inspections During Construction and Final Certification of Completed Work in accordance with project Specifications.

9. A Mandatory Pre-Proposal Site Visit will be conducted as follows:

Site Visit: **Charlotte Amalie High School**
DATE: **Monday, December 14, 2015**
TIME: **3:00 P.M**

10. Proposal Closing Date: **Tuesday, December 22nd, 2015**
11. Closing Time: **4:00 PM Atlantic Standard Time**

12. The Proposal shall consist of a Qualification Statement, which shall contain the following at minimum:

    1. Firm Name, Mailing Address, Telephone, E-mail and Fax Number;
    2. Year Established and any Former Names;
    3. Types of Services for which firm is Qualified;
    4. Name of Principals of the Firm and States in which Firm/Principal is Registered (A principal of the firm must be registered in the U.S. Virgin Islands);
    5. Names of key personnel who will be assigned to this project and their resume of education and experience;
    6. Office staff available for this assignment and their qualification;
    7. Sub-consultants proposed for this assignment and their qualifications;
    8. Current workload: Scope, Cost, Percent completed, Both as Prime and Subcontractor;
    9. List of selected completed projects, their scope and cost, and name, telephone number of owner's representative we can contact;
    10. Narrative description of your approach to this project, your anticipated projected schedule and any unique or unusual circumstances you anticipate with this project.

PLEASE SUBMIT FIVE (5) COPIES OF YOUR PROPOSAL.
PROPOSALS SHALL BE SUBMITTED IN A SEALED ENVELOPE ADDRESSED AS FOLLOWS:

Mr. Anthony D. Thomas, Director Of Procurement
Division of Procurement
Department of Education
1834 Kongens Gade,
St. Thomas, U.S. Virgin Islands

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CONTRACTUAL REQUIREMENTS

All bid proposals and subsequent contract and supporting documents (if selected) must reflect the legal name of entity. Supporting documents that must be submitted prior to contract execution and within the time established by the Government shall include, but not be limited to, the following:

(1) ***Certificate of Resolution***, as to the authorized negotiator and signer of a contract.

(2) Current ***Virgin Islands Business License*** issued to the legal name of record of the entity by the Government of the Virgin Islands, Department of Licensing and Consumer Affairs.

(3) Current original ***Certificate(s)of Good Standing/Existence***, in legal name of the Contractor by the Virgin Islands Office of the Lt. Governor, Division of Corporations and Trademarks.

(4) Certificate of Issuance or Renewal of Trade Name issued by the Virgin Islands Office of the Lt. Governor, Division of Corporations and Trademarks, if applicable.

(5) ***Articles of Incorporation or Organization***, as applicable; or documents governing operation.

(6) ***Certificate of Liability Insurance*** indicating proof of coverage of **Professional Liability Insurance** and **General Liability/Public Liability Insurance** - each of no less than [One Hundred Thousand Dollars and Zero Cents **($100,000.00)**] for any one occurrence. The Contractor must provide a ***Certificate of Liability Insurance*** and ***Declaration/Endorsement*** pages that indicating that the Government of the Virgin Islands, Department of Education, is as "**certificate holder**" and an "**additional insured**" on the **General Liability/Public Liability Insurance.** The Professional Liability Insurance must cover the services to be provided under the contract.

(7) Certificate of Government Insurance/Copy of Certificate providing firm/agents are covered by Workers' Compensation Employee's Liability.

Please note the above-referenced documents are subject to modification at the Government's discretion.

Any silence, absence, or omission from the contract specifications concerning any point shall be regarded as meaning that only the best commercial practices are to prevail.

All contractual documents including insurance certificates/policies must be kept updated and maintained throughout the term of the contract

Helber Hastert & Fee

Charlotte Amalie High School

Date: 3/8/2013

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CHARLOTTE AMALIE HIGH SCHOOL BUILDING 11

Existing Conditions:

Building 11 is a three-story building with a flat roof. The building is framed in reinforced concrete and concrete masonry unit (CMU). The second and third floors as well as the roof consist of reinforced concrete slabs bearing on either reinforced concrete beams (at the perimeter of the building) or CMU walls (in between classrooms). On the south side of the building, the second and third floor slab cantilevers pass the exterior wall of the building to create a walkway for classroom access. The roof slab also cantilevers to provide a roof over the third floor walkway. Two reinforced concrete stairs exist on the south side of the building. Extensive retrofits in the form of structural steel channels bolted to the underside of the second, third, and roof slabs exist throughout the building.

It was observed that at the second and third floors, the base of the metal railing posts at the walkways has corroded and initiated spalling of the slab edge. The extent of the spalls (open and closed) varies depending on location along the building length. The spalls are likely caused because the base plate at the bottom of the railing post is embedded on a concrete curb at the edge of slab instead of being raised above the top of the curb. With the current post base detail, water ponds on top of the curb and accelerates corrosion of the post base plate. These spalls were identified as a life safety concern because they pose a falling hazard to the occupants of the building.

Recommended Scope of Work:

01 Conduct a survey of all cracks and spalls (open and closed) on the underside and edges of the floor and roof slabs along the south side of the building, particularly near railing post connections.
02 Fill all cracks and patch all spalls on the underside and edges of the concrete floor and roof slabs per approved concrete repair procedures. At spalls coinciding with locations of railing posts, clean the post base plate and its fasteners free of rust and replace curb reinforcing bars as required before installing patch material. Note that since the base plate of the railing post will remain prone to corrosion damage due to its elevation with respect to the top of the curb, this spall repair solution will only provide a short term solution.
03 As a long term consideration, replace the railing (or bottom portions of the posts and base plates) such that the post base plates are raised from the top of the curb via a grout bed.
04 It is recommended that the railing, particularly the posts and their base plates) be coated with a paint system appropriate for highly corrosive environments.
05 A licensed structural engineer shall conduct all surveys, design all concrete repair details, and prepare all required specifications.

CHARLOTTE AMALIE HIGH SCHOOL BUILDING 11








CHARLOTTE AMALIE HIGH SCHOOL BUILDING 20

Existing Conditions:

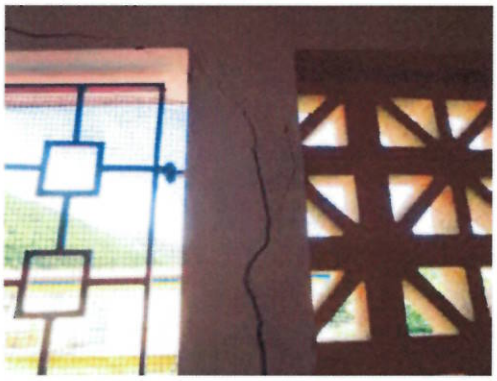
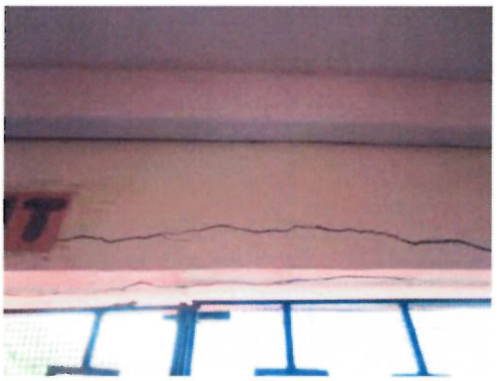
Building 20 (Cottage) is a one-story building with a wood framed gable roof. Reinforced concrete beams and columns support the gravity loads from the wood-framed roof. Columns are typically 24 inches square. Foundations for the columns are below grade. Since the building is located on a sloped site, the columns on the south side of the building extend below the first floor of the building. Spalls with exposed reinforcing were observed at several of the concrete columns. On the North portion of the buildings (on-grade backyard porch), the spalls appear to be initiated by corrosion of electrical metal boxes (at receptacles) and metal conduits. In one case, the cracks and spalls in the columns extend to a header beam over a door opening. No exposed reinforcing was observed in this area of the building. On the south portion of the building (suspended front walkway), three columns were observed to be severely damaged. Here, concrete has spalled leaving reinforcing exposed. At one of the three columns (corner column), the cross section of the column has been reduced to less than 50% of its original size. In the front portion of the building, damage to the columns appears to be the result of insufficient clear cover to the reinforcing.

Recommended Scope of Work:

01 At the north portion of the building (on-grade backyard patio), chip and remove metal electrical boxes and conduit at damaged concrete columns. Install new PVC receptacles and conduit as required.
02 At the north portion of the building (on-grade backyard patio), fill all concrete cracks and patch all concrete spalls in columns and beams per approved concrete repair procedures. Fill all cavities resulting from the removal of electrical boxes and conduit per approved concrete repair procedures.
03 At the south portion of the building (suspended front walkway), shore walkway concrete beams as required at locations were the concrete columns have experienced a loss in cross section due to severe spalling.
04 At the south portion of the building (suspended front walkway), replace all concrete columns were loss of cross section has occurred: Demolish existing column from top of foundation to underside of concrete beam. Install vertical reinforcing dowels at top of foundation and at bottom of concrete beam. Use adhesive rated for exterior exposure to install reinforcing dowels. Install new column longitudinal and transverse reinforcing bars (longitudinal reinforcing bars to lap with vertical reinforcing dowels). Provide adequate clear cover to all reinforcing dowels and bars. Form and cast new concrete column.
05 A licensed structural engineer shall design all concrete repair/replacement details and prepare all required specifications.

CHARLOTTE AMALIE HIGH SCHOOL BUILDING 20





CHARLOTTE AMALIE HIGH SCHOOL BUILDING 30

Existing Conditions:

Building 30 (Electrical and Carpentry Shop) is a one-story building with structural steel framing. The framing consists of structural steel rigid frames in the transverse direction of the building. Built-up sections with varying depth are used for the columns and beams in the frames. The frames span the width of the building and support a gable roof framed with cold-formed steel purlins and metal decking. At the base, the columns are connected to the top of the concrete slab-on-grade suggesting and integrated slab-on-grade foundation. Moderate to severe corrosion was observed at the bottom of several of the steel columns that make up the frames. In some cases, more than 50% of the cross section of the column was observed to be lost. The column base plates are severely corroded as well (two base plates have completely corroded away leaving the column practically bearing on top of the slab-on-grade/foundation). Corrosion at the bottom of the columns has occurred because of extensive leaks in the building's envelope (utility penetrations in the perimeter CMU walls and perforations in the roof decking). Because the top of the column base plates are flush with the top of the interior slab-on-grade, water infiltrating through the breaches in the building's envelope pond at the base of the columns. Therefore, the bottom portions of the columns and the column base plates are regularly exposed to rainwater and moisture. Note that this building is naturally ventilated and that there is no cladding/ceiling protecting the steel frames. Therefore, the steel frames are considered exterior and exposed.

Recommended Scope of Work:

01 Perform a survey and assess the condition of all steel columns in the building.
02 Provide shoring as required at the roof beams at locations were corrosion has resulted in loss of cross section at the bottom of the steel columns.
03 Repair all corroded steel columns and column base plates where loss of cross section has occurred: The suggested repair method is to cut-off the corroded portion at the base of the column and replace it with a new steel splice section of equal size and thickness as the existing column. As a preventive measure to minimize future corrosion, it is recommended that the column base plate be raised above the top of the slab-on-grade. This could be achieved by placing a 3-inch thick non-shrink grout bed between the top of the slab-on-grade/ foundation and the bottom of the base plate. The new column splice section would have a base plate shop welded to its bottom and would be fastened to the top of the slab-on-grade/foundation via post-installed anchor rods. The top of the new column splice section would be field welded to the bottom of the existing column.
04 Clean and prepare the steel column and its base plate (exterior and exposed) as recommended by the Society for Protective Coatings (SSPC). Apply a three-coat system consisting of one primer coat and one mid-coat of epoxy-polyamide and one finish coat of aliphatic polyurethane.
05 A licensed structural engineer shall design all structural steel repair details and prepare all required specifications.

CHARLOTTE AMALIE HIGH SCHOOL BUILDING 30






CHARLOTTE AMALIE HIGH SCHOOL WALKWAYS

Existing Conditions:

The walkways connecting the major buildings on the campus consist of structural steel pipe columns supporting a two-way concrete slab. Typical column spacing is approximately 8'-0" on center. Foundations for the columns as well as the column base plates are below grade. Therefore, connection details at the base of the columns could not be observed. Moderate to severe corrosion exists at the bottom of several of the columns, and in some cases, more than 50% of the cross section of the columns has been lost. It is reasonable to assume that the column base plates exhibit similar or more extensive damage than the visible portions of the columns right above grade. Corrosion at the bottom of the columns occurs because the column base plates are embedded below grade. Hence, the bottom portions of the columns are continuously in direct contact with earth, rainwater, and moisture.

Recommended Scope of Work:

01 Provide shoring as required at the walkway roof slab at locations were corrosion has resulted in loss of cross section at the bottom of the steel columns.
02 Remove finish grade to expose the column base plates at all columns and assess their condition.
03 Repair all corroded steel columns and column base plates where loss of cross section has occurred: The suggested repair method is to cut-off the corroded portion at the base of the column and replace it with a new steel pipe splice section of equal size and thickness as the existing column. To prevent the corrosion from reoccurring, it is recommended that the column base plate be raised such that it is a minimum of four inches above grade. To raise the column base plate, it is suggested that a new concrete pedestal be constructed atop the existing foundation. The new pedestal would be connected to the existing foundation via post-installed reinforcing dowels. At the top of the pedestal, the new pipe splice section (with new base plate at the bottom) would be fastened through cast-in anchor rods. Lastly, the top of the new pipe splice section would be field welded all around to the bottom of the existing column.
04 Clean and prepare the steel column and its base and top plates (exterior and exposed) as recommended by the Society for Protective Coatings (SSPC). Apply a three-coat system consisting of one primer coat and one mid-coat of epoxy-polyamide and one finish coat of aliphatic polyurethane.
05 It is recommended that the base plates be raised above grade at all columns per item 03 above, including those were corrosion has not yet resulted in loss of cross section at the column base plate and/or at the base of the column.
06 A licensed structural engineer shall perform all surveys, design all structural steel repair details, and prepare all required specifications.

CHARLOTTE AMALIE HIGH SCHOOL WALKWAYS