



**REQUEST FOR QUOTES
(RFQ) #17-0375DC**

REPAIRS TO DIVING PLATFORM AT GT BRAY

DATE ISSUED: January 12, 2017

Manatee County, a political subdivision of the State of Florida, (hereinafter "County") invites your participation in the following request for quotes. The specifications stated herein are of the minimum requirements. All quotes submitted must be in accordance with the Request for Quotes documents in their entirety.

TIME AND DATE DUE: January 31, 2017 at 3:00 P.M.

**MANDATORY SITE INSPECTION TO BE COORDINATED WITH CHARLES FRAZIER BY
CALLING 941.527.9285**

In order to ensure all prospective Quoters have sufficient information and understanding of the County's needs, a Site Inspection will be conducted at the **Manatee County GT Bray Park, 5502 33rd Avenue Drive West, Bradenton**. Manatee County Construction Coordinator, **Charles Frazier (941.527.9285)** will be the point of contact. All interested parties are encouraged to attend.

**EMAIL ALL QUESTIONS TO PURCHASING, deborah.carey-reed@mymanatee.org.
ANY CHANGES TO THE QUOTE DOCUMENT SHALL BE IN WRITING VIA ADDENDA.**

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FOR INFORMATION CONTACT:

Deborah Carey-Reed, CPPB – Contracts Specialist
PHONE (941) 749-3074 deborah.carey-reed@mymanatee.org
Manatee County FMD/Procurement Division

INFORMATION TO QUOTERS

QUOTE FORM DELIVERY REQUIREMENTS

Any quotes received after the stated time and date will not be considered. Acceptable methods of delivery of quotes are as follows:

Email Address: deborah.carey-reed@mymanatee.org

US MAIL to: Manatee County Purchasing Division
1112 Manatee Avenue West, Suite 803, Bradenton FL 34205

MODIFICATION OF RFQ DOCUMENTS

If a Quoter wishes to recommend changes to the RFQ documents, the Quoter shall furnish, in writing, data and information necessary to aid County in evaluating the request to modify the Specifications. County is not obligated to make any changes to the RFQ documents. Unless an Addendum is issued, the RFQ documents shall remain unaltered. **Quoters must fully comply with the RFQ documents in their entirety.**

CLARIFICATION

It shall be the responsibility of all vendors to request any additional clarification of the contents herein. Clarification will be furnished by written addendum from Purchasing. Vendors shall not accept any verbal or telecommunication explanation as authorized clarification of the contents herein.

LOBBYING

After the issuance of any Invitation for quote prospective QUOTERS, or any agent, representative or person acting at the request of such Vendor shall not contact, communicate with or discuss any matter relating in any way to the Invitation for quote with any officer, agent or employee of Manatee County other than the Purchasing Official or as directed in the Invitation for Bid, pursuant to the Manatee County Code. This prohibition includes the act of carbon copying officers, agents or employees of Manatee County on all correspondence, including email correspondence. This requirement begins with the issuance of an Invitation for Bid, and ends upon execution of Contract or when the invitation has been cancelled. Violators of this prohibition shall be subject to sanctions as provided in the Manatee County Code.

WITHDRAWAL OF OFFERS

Quoter may withdraw offers as follows:

- a. After the responses to a solicitation are opened or a selection has been determined, but before a Contract is signed, a Quoter alleging a material mistake of fact may be permitted to withdraw their Quote if:
 1. the mistake is clearly evident in the solicitation document; or
 2. Quoter submits evidence which clearly and convincingly demonstrates that a mistake was made. Request to withdraw a Quote must be in writing and approved by the Purchasing Official.

IRREVOCABLE OFFER

Any Quote may be withdrawn up until the time and date set for opening of the Quote. Any Quote not so withdrawn shall, upon opening, constitute an irrevocable offer for a period of ninety (90) days to sell to Manatee County the goods or services set forth in the attached RFQ until one or more of the Quotes have been duly accepted by County.

COSTS INCURRED IN RESPONDING

This solicitation does not commit the County to pay any costs incurred in the submission of quotes or make necessary studies or designs for the preparation thereof, nor to procure or contract for the equipment.

RESERVED RIGHTS

The County reserves the right to accept or reject any and/or all quotes, to waive irregularities and technicalities, and to request resubmission. Also, the County reserves the right to accept all or any part of the quote and to increase or decrease quantities to meet additional or reduced requirements of the County. Any sole response received by the first submission date may or may not be rejected by the County depending on available competition and current needs of the County. For all items combined, the quote of the lowest responsive, responsible quoter will be accepted, unless all quotes are rejected.

APPLICABLE LAWS

Quoter must be authorized to transact business in the State of Florida. All applicable laws and regulations of the State of Florida and ordinances and regulations of Manatee County will apply to any resulting Contract. Any involvement with any Manatee County procurement shall be in accordance with Manatee County Purchasing Ordinance, as amended.

PUBLIC CONTRACTING AND ENVIRONMENTAL CRIMES

A person or affiliate who has been placed on the State's convicted vendor list following a conviction for a public entity crime, as that term is defined in Florida Statute § 287.133, may not submit a quote to provide any goods or services to a public entity; may not submit a quote with a public entity for the construction or repair of a public building or public work; may not submit Bids on leases of real property to a public entity; may not be awarded or perform Work as a Vendor, Supplier, Subvendor, or Consultant under a Contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in Florida Statutes § 287.017 for CATEGORY TWO for a period of thirty-six (36) months following the date of being placed on the convicted list.

In addition, the Manatee County Code prohibits the Award of any resulting Contract to any person or entity who/which has, within the past five (5) years, been convicted of, or admitted to in court or sworn to under oath, a public entity crime or of any environmental law that, in the reasonable opinion of the Purchasing Official, establishes reasonable grounds to believe the person or business entity will not conduct business in a responsible matter.

A Public Contracting and Environmental Crimes Certification form is included (reference Attachment C of this document) for this purpose.

QUOTE FORMS

Quotes must be submitted on attached provided forms, although additional pages may be attached. **Quoters must fully complete all pages of the Quote Forms. Quote Forms must be executed by an authorized signatory who has the legal authority to make the Quote and bind the company. Quoters must fully comply with all requirements of this RFQ in its entirety.** Failure to comply shall result in default of the resulting Contract, whereupon, the defaulting Vendor shall be required to pay for any and all re-procurement costs, damages, and attorney fees as incurred by County.

LEGAL NAME

Quotes shall clearly indicate the legal name, address and telephone number of the Quoter on the Quote Form. Quote Forms shall be signed above the typed or printed name and title of the signer. The signer must have the authority to bind the Quoter to the submitted Quote.

DISCOUNTS

Any and all discounts must be incorporated in the prices contained in the Quote and not shown separately. The prices as shown on the Quote Form shall be the prices used in determining Award.

TAXES

Manatee County is exempt from Federal Excise and State Sales Taxes. (F.E.T. Cert. No. 59-78-0089K; Florida Sales Tax Exempt Cert. No. 85-8012622206C-6); therefore, the Quoter is prohibited from delineating a separate line item in his Quote for any sales or service taxes. Nothing herein shall affect the Quoter's normal tax liability.

DESCRIPTIVE INFORMATION

Unless otherwise specifically provided in the IFB documents, all equipment, materials and articles provided shall be new and of the most suitable grade for the purpose intended. Unless otherwise specifically provided in the IFB documents, reference to any equipment, material, article or patented process, by trade name, brand name, make or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition.

EQUAL EMPLOYMENT OPPORTUNITY CLAUSE

The County of Manatee, Florida, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252) and the Regulations of the Department of Commerce (15 CFR Part 8) issued pursuant to such Act, hereby notifies all vendors that it will affirmatively ensure that in any contract entered into pursuant to this invitation, minority business enterprises will be afforded full opportunity to submit quotes in response to this invitation and will not be discriminated against on the grounds of race, color or national origin in consideration of an award.

MATHEMATICAL ERRORS

In the event of multiplication/extension error(s), the unit price shall prevail. In the event of addition error(s) the extension totals will prevail. All Bids shall be reviewed mathematically and corrected, if necessary, using these standards, prior to additional evaluation.

END OF SECTION

GENERAL REQUIREMENTS

SCOPE OF WORK

It is the intent of this project is for the vendor to furnish all materials and labor replace the existing concrete diving platforms, which generally consists of providing concrete, steel, wood, and handrail repair/replacement, at GT Gray Park as noted on the structural drawings and specifications provided herein.

Job location: Manatee County GT Bray Park, 5502 33rd Avenue Drive West, Bradenton.

GENERAL

1. The Work schedule shall be coordinated with the County so as to minimize interruption of the normal building activities. It is expected for the vendor is to begin work within ten (10) calendar days from the receipt of the purchase order which shall serve as the notice to proceed.
2. The work is to be done Monday thru Friday, from 7:00 AM to 5:00 PM. The work is to continue uninterrupted once begun. The vendor is to provide sufficient labor, parts and resources to complete the work. Any other hours of work must be approved by the County. Work shall be **completed within 30 calendar days** from date of notice to proceed.

USE OF PREMISES/SITE ACCESS

1. The County shall occupy and use the premises and portions of the building not affected by the work. The Vendor shall take all precautions necessary to protect the building and its occupants during the installation period and shall minimize interruptions and inconvenience to the daily operations of the facilities.
2. Vendor shall confine operations at the site to the areas directed by the County's representative. Portions of the site beyond areas on which work is indicated are not to be disturbed. Conform to site rules and regulations affecting the Work.
3. Vendor's personnel shall not pass into areas beyond the designated "limits of work". The Vendor shall be responsible for toilet facilities for their personnel.
4. Vendor shall provide reasonable maintenance of traffic ways for the public and preservation of the continuation of the County's business taking into full consideration all local conditions. Vendor shall comply with Federal Department of Transportation (FDOT), Occupational and Safety and Health Administration (OSHA) and any local safety regulations. Do not use these areas for parking or storage of materials.
5. The Vendor shall continuously maintain adequate protection of all work from damage and shall protect all property from injury or loss arising in connection with the contract. Vendor shall make good any such damage, injury or loss, except such as may be directly due to error by County. Vendor shall provide, protect, and maintain all passageways, guard fences, lights, and other facilities required by public authority or local conditions.
6. Lock vehicles when parked and unattended, so as to prevent unauthorized use. Do not leave such vehicles unattended with the motor running or ignition key in place.

7. Keep public areas free from accumulation of waste materials, rubbish, or debris. Smoking or open fires will not be permitted within the building enclosure or on the premises. The consumption of alcoholic beverages is prohibited on the property. It is Vendor's responsibility to dispose of all waste generated in the course of the Work.

PERMITS/FEES/REGULATIONS

Vendor shall be required to give all necessary notices, obtain all permits and inspections, and pay all costs in connection with the work. Vendor shall assure compliance with any OSHA, EPA, and/or federal, state, and local rules, codes, and regulations. Any conflicts between the specifications and code shall be brought to the attention of the County's representative and resolved before the work is continued. Before starting work the Vendor shall furnish a copy of all required approvals to the County.

WARRANTY

The Vendor shall **warrant their workmanship for a minimum of three years** from project acceptance.

MANUFACTURER(S) AND PRODUCTS

The Work shall be as prescribed by good industry practice and in accordance with manufacturers' recommendations. All materials and equipment required for the work, except as specified otherwise, shall be new, of first class quality, and shall be furnished, installed and finished in every detail.

WORKERS

Successful Vendor must use skilled personnel trained and experienced in the necessary trades and who are familiar with the specified requirements and methods needed for proper performance of the Work.

PRICES

Quoters shall quote unit prices, F.O.B. Destination, including all discounts in accordance with unit of quantity indicated on Quote Form. The prices quoted shall be used for payment and shall be deemed to include payment in full for all transportation, labor, materials, equipment, and incidentals used in completing the work in an acceptable manner to the County.

PROJECT CLOSE-OUT

At the close-out of all projects, the Vendor shall:

1. Clean Work area and remove any and all excess materials and debris. Correct any damages to property that may have occurred as a result of your Work completion.
2. The Vendor shall remedy any deficiencies / incomplete items promptly.
3. When County determines the Work is acceptable in accordance with this specification, the Vendor shall provide the close out submittals, including but not necessarily limited to the following:
 - 1 set Certificate of Warranties
 - 1 set Manufacturer's Product Literature (when applicable)

END OF SECTION

BASIS OF AWARD & MINIMUM QUALIFICATIONS

BASIS OF AWARD

Award shall be to the lowest responsive, responsible Quoter for the Work as specified herein.

Quote prices shall include costs for furnishing all labor, equipment and/or materials for the requirements listed herein in accordance with and in the manner set forth and described in the Quote document to the County's satisfaction.

Whenever two (2) or more quotes are equal with respect to price, quality and service, the quote received from a local business shall be given preference in award. Whenever two (2) or more quotes which are equal with respect to price, quality and service are received, and neither of these quotes is from a local business, the award shall be determined by a chance drawing conducted by the Purchasing Office and open to the public. Local business is defined as a business duly licensed and authorized to engage in the sale of goods and/or services to be procured, which has a place of business in Manatee County with full time employees at that location.

QUALIFICATIONS OF THE VENDOR

No person who is not certified or registered pursuant to the terms of Florida Statutes Chapter 489 as a **General Contractor** on the day the quote is submitted, and who has continuously held that certification or registration for a period of at least **two (2) consecutive years** immediately prior to the day the quote is submitted, may be qualified to quote and perform work on this project.

END OF SECTION

GENERAL TERMS AND CONDITIONS

ROYALTIES AND PATENTS

The Vendor shall pay all royalties and license fees for equipment or processes in conjunction with the equipment and/or services being furnished. Vendor shall defend all suits or claims for infringement of any patent, trademark or copyright, and shall save County harmless from loss on account thereof, including costs and attorney's fees.

AUTHORIZED PRODUCT REPRESENTATION

The Vendor, by virtue of submitting the name and Specifications of a manufacturer's product, will be required to furnish the named manufacturer's product. Failure to perform accordingly may, in County's sole discretion, be deemed a Material Breach of the resulting Contract, and shall constitute grounds for County's immediate termination of the resulting Contract.

CANCELLATION

Any failure of the Vendor to furnish or perform the Work (including, but not limited to commencement of the Work, failure to supply sufficient skilled workers or suitable materials or equipment) in accordance with the Contract, the County may order the stop of the Work, or any portion thereof, until the cause for such order has been eliminated. If the Vendor persistently fails to perform the Work in accordance with the Contract, the County reserves the right to terminate the Contract and select the next qualified quoter or re-advertise this procurement in part or in whole. The County reserves the right to cancel all or any undelivered or unexecuted portion of this Contract with or without cause.

INDEMNIFICATION

The Vendor covenants and agrees to indemnify and save harmless County, its agents and employees, from and against all claims, suits, actions, damages, causes of action, or judgments arising out of the terms of the resulting Contract for any personal injury, loss of life, or damage to the property sustained as a result of the performance or non-performance of services or delivery of goods; from and against any orders, judgments, or decrees, which may be entered against County, its agents or employees; and from and against all costs, attorney's fees, expenses and other liabilities incurred in the defense of any such claim, suit or action, and the investigation thereof. Nothing in the resulting Award, Contract or Purchase Order shall be deemed to affect the rights, privileges and immunities of County as set forth in Florida Statutes § 768.28.

SUBVENDORS, SUPPLIERS AND OTHERS

The identity of Subvendors, Suppliers, and other persons and organizations (including those who are to furnish the principal items of material and equipment) may be requested by County and the Quoter shall respond within five (5) days after the date of such request.

Subvendors shall be bound by the terms and conditions of the resulting Contract insofar as it applies to their work, but this shall not relieve the prime Vendor from the full responsibility to County for the proper completion of all Work to be executed under the resulting Contract.

The employment of unauthorized aliens by any Vendor is considered a violation of Section 274 (e) of the Immigration and Employment Act. If the Vendor knowingly employs unauthorized aliens, such violation shall be cause for unilateral cancellation of the resulting Contract.

INSURANCE COVERAGE

The Vendor will not commence Work under the resulting Contract until all insurance under this section and such insurance coverage as might be required by County has been obtained. The Vendor shall obtain, and submit to the Purchasing Division within ten (10) calendar days from the date of Notice of Intent to Award, at his expense, the following minimum amounts of insurance (inclusive of any amounts provided by an umbrella or excess policy):

a. Workers' Compensation/Employers' Liability

Part One - There shall be no maximum limit (other than as limited by the applicable statute) for liability imposed by Florida Workers' Compensation Act or any other coverage required by the resulting Contract Documents which are customarily insured under Part One of the standard Workers' Compensation Policy.

Part Two - The minimum amount of coverage required by the resulting Contract Documents which are customarily insured under Part Two of the standard Workers' Compensation Policy shall be:

(Each Accident)	<u>\$100,000</u>
(Disease-Policy Limit)	<u>\$500,000</u>
(Disease-Each Employee)	<u>\$100,000</u>

b. Commercial General Liability

The limits are to be applicable only to Work performed under the resulting Contract and shall be those that would be provided with the attachment of the Amendment of Limits of Insurance (Designated Project or Premises) endorsement (ISO Form CG 25 03) a Commercial General Liability Policy with the following minimum limits.

General Aggregate:

Products/Completed Operations Aggregate	<u>\$2,000,000</u>
Personal and Advertising Injury	<u>\$1,000,000</u>
Each Occurrence	<u>\$1,000,000</u>
Fire Damage (Any One Fire)	<u>\$Nil</u>
Medical Expense (Any One Person)	<u>\$Nil</u>

ADDITIONAL INSURED: Manatee County, a political subdivision of the State of Florida, shall be specifically named as additional insured on the Commercial General Liability Policy.

c. Business Auto Policy

Each Occurrence Bodily Injury and	
Property Damage Liability Combined	<u>\$300,000</u>
Annual Aggregate (if applicable)	<u>\$1,000,000</u>

ADDITIONAL INSURED: Manatee County, a political subdivision of the State of Florida, shall be specifically named as additional insured on the Business Auto Policy.

d. Certificates of Insurance and Copies of Policies

Certificates of Insurance evidencing the insurance coverage specified herein shall be filed with the Purchasing Official before operations are begun. The required certificates of insurance shall name the types of policy, policy number, date of expiration, amount of coverage, companies affording coverage, and also shall refer specifically to the quote number and title of the Project. All insurance policies

required herein shall be issued by companies that are authorized to do business under the laws of the State of Florida and hold an A.M. Best rating of A- or better. Insurance, as specified herein, shall remain in force and effect for the duration of the Project including any warranty periods.

- e. Complete Policies: The entire and complete insurance policies required herein shall be provided to County on request.

Nothing herein shall in any manner create any liability of County in connection with any claim against the Vendor for labor, services, or materials, or of Subvendors; and nothing herein shall limit the liability of the Vendor or Vendor's Sureties to County or to any Workers, Suppliers, material men or employees in relation to the resulting Contract.

By way of its submission of a quote hereto, Vendor maintains, and will maintain during the term of any Contract arising from this solicitation, insurance coverage from responsible companies duly authorized to do business in the State of Florida and deemed acceptable to County, as set forth in this solicitation; and

- f. Certification Requirements – In order for the certificate of insurance to be accepted it **must** comply with the following:

1. The certificate holder shall be:
Manatee County Board of Commissioners,
A political subdivision of the State of Florida
P.O. Box 1000, Bradenton, FL 34206-1000

MATERIAL/SAFETY DATA SHEET

It shall be the responsibility of the awarded bidder(s) to submit, upon issuance of release order, a Material Safety Data Sheet (MSDS) for all toxic substances in accordance with Florida Statutes Chapter 442, The Right to Know Law, which mandates on-site MSDS for all toxic substances appearing in the work place

BE GREEN

All Vendors are encouraged to use as many **environmentally preferable** "green" products, materials, supplies, etc. as possible in order to promote a safe and healthy environment. **Environmentally preferable are products or services that have a reduced adverse effect on the environment.** Provide detail of your organization's initiative and its ability to meet the goal of environmental sustainability.

END OF SECTION

QUOTATION FORM**DATE DUE:** January 27, 2017 at 3:00 P.M.

To: Manatee County Purchasing
 1112 Manatee Avenue West, Suite 803, Bradenton, Florida 34205
Attention: Deborah Carey-Reed, CPPB- Contract Specialist
 Email: deborah.carey-reed@mymanatee.org Phone: 941-749-3074

Re: RFQ #16-3171DC REPAIRS TO DIVING PLATFORM AT GT BRAY

We, the undersigned, hereby declare that we have carefully reviewed the quote documents, and with full knowledge and understanding of the aforementioned herewith submit this quote, meeting each and every specification, term, and condition contained in the Request for Quotes.

We understand that the quote specifications, terms, and conditions in their entirety shall be made a part of any agreement or contract between Manatee County and the successful quoter. Failure to comply shall result in contract default, whereupon, the defaulting vendor shall be required to pay for any and all procurement costs, damages, and attorney fees as incurred by the County.

Communications concerning this Quote shall be addressed as follows:

Person's Name: _____

Email: _____ Phone: _____

Date: _____ FL License / Certification # _____

COMPANY'S NAME: _____

AUTHORIZED SIGNATURE(S): _____

 Name and Title of Above Signer(s)

CO. MAILING ADDRESS: _____

STATE OF INCORPORATION: _____ (if applicable)

SITE INSPECTION BY: _____ **DATE:** _____

Acknowledge Addendum Nos. _____ Dated: _____

QUOTATION FORM**Re: RFQ #16-3171DC REPAIRS TO DIVING PLATFORM AT GT BRAY**

	DESCRIPTION	U/M	
1	Mobilization	1 LS	\$
2	Repair of diving tower and platforms	1 LS	\$
3	Debris removal and site cleanup	1 LS	\$
	TOTAL PROJECT COMPLETE		\$
	Slab edge and beam section repairs	\$_____ per cubic foot If required, unit cost to be used for actual quantity repaired for any additional work uncovered during construction and not specified herein.	

Completion within _____ calendar days after notice to proceed. (Not to exceed 30 days)

- Pursuant to (Hees & Associates, Inc.) Specification, page 030131-2, provide Manufacturer being bid: _____
- Your organization has been in business (under this firm's name) as a _____ for how many years? _____.
- Describe and give the date and owner of the last government project you've completed. Include contact name and phone number:

- Have you ever failed to complete work awarded to you? If so, state when, where (contact name, address, phone number) and why?

- Have you ever been debarred or prohibited from bidding on a governmental entity's construction project? If yes, name the entity and describe the circumstances:

QUOTER: _____

SECTION 030131 – CONCRETE REPAIR WORK

PART 1: GENERAL

1.01 SUMMARY

- A. The types of repairs required are shown by the Drawings or are described within the Specifications. Compensation for completed Work shall be based on field-measured quantities.

1.02 REFERENCES

- A. Comply with provisions of the following codes, specifications and standards, except where more stringent requirements are shown or specified.
- B. ACI 301 - Specifications for Structural Concrete for Buildings; American Concrete Institute.
- C. ACI 318 - Building Code Requirements for Reinforced Concrete; American Concrete Institute.
- D. ACI 347R - Guide to Formwork for Concrete; American Concrete Institute.
- E. ASTM A 185 - Standard Specification for Steel Welded Wire Fabric, Plain, for Concrete Reinforcement.
- F. ASTM A 615 - Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement.
- G. ASTM C 31 - Standard Practice for Making and Curing Concrete Test Specimens in the Field.
- H. ASTM C 33 - Standard Specification for Concrete Aggregates.
- I. ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
- J. ASTM C 172 - Standard Practice for Sampling Freshly Mixed Concrete.
- K. ASTM C 309 - Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.
- L. ASTM C881 - Standard Specification for Epoxy-Resin-Base Bonding Systems for Concrete.
- M. NACE International – National Association of Corrosion Engineers.
- N. SSPC – Steel Structures Painting Council.

1.03 QUALITY ASSURANCE**A. Comply with the following:**

1. Except as shown or specified, the Work of this Section shall conform to the requirements of International Concrete Repair Institute (ICRI), 3166 S. River Rd., Suite 132, Des Plaines, IL 60018, (847) 827-0830, www.icri.org.
ICRI Guideline No. 310.1R-2008 Guide for Surface Preparation for the Repair of Deteriorated Concrete Resulting from Reinforcing Steel Corrosion (formerly Guideline No. 03730).
2. Apply all repair materials in accordance with the manufacturer's recommendations for storage, preparation, mixing, placement and curing.

1.04 SUBMITTALS

1. Submit Specification Data Sheets for each product in accordance with provisions noted in the General Conditions.

PART 2: PRODUCTS**2.01 ACCEPTABLE MANUFACTURERS**

- A. **Sika Corporation.**
- B. **Sto Concrete Restoration Division.**
- C. **Euclid Chemical Company.**

2.02 PRODUCT SCHEDULE AND NOTES

<u>Description</u>	<u>Sika</u>	<u>Sto</u>	<u>Euclid</u>
Vertical / Overhead:	<i>Monotop 615</i>	<i>CR 702CI</i>	<i>Verticoat Supreme</i>
Slab Edge / Beam:	<i>Sikacrete 211</i>	<i>CR 311CIX</i>	<i>Eucocrete Supreme / Tamms Form & Pour</i>
Reinforcing Protection:	<i>Armatec 110 Epocem</i>	<i>CR246</i>	<i>Corr-Bond</i>

- A. CONTRACTOR is responsible for ensuring compatibility of cementitious repair materials and weather protection products to be used.
- B. Repairs deeper than allowed for neat mortar shall be extended with coarse aggregate per the manufacturer's recommendations.
- C. Zinc rich rebar primers are not allowed.
- D. Single Source Responsibility: Provide mortars and anti-corrosion and bonding agent produced by the same manufacturer for concrete repairs.
- E. Substitutions shall not be allowed unless approved by the engineer and owner..

2.03 REINFORCING MATERIALS

- A. Reinforcing Steel: Shall be ASTM A615 - Grade 60 deformed bars, free from oil, scale and rust, placed in accordance with the American Concrete Institute Standard Specifications and Details.
- B. Chemical Anchors shall be installed with an equal two part epoxy polymer injection system such as Hilti RE 500 V3.

PART 3: EXECUTION

3.01 REMOVAL GEOMETRY

- A. Excavate and remove all spalled and unsound concrete resulting from reinforcing steel corrosion. Maximum size chipping hammers shall be limited to 30 pounds. Fractured aggregate profile shall conform to NACE-6: Surface Preparation of Concrete.
- B. Sawcut along edges of excavated areas, to achieve a minimum depth of 1/4 inch to a maximum of 1/2 inch. Adjust saw depth to avoid cutting into reinforcing bars.
- C. Edges of repair areas adjacent to sound existing concrete shall be cut in straight lined regular shaped patterns.
- D. Existing reinforcing shall be chipped out all around the bar until the entire circumference has been exposed to clean unaffected cross-section and a 3/4 inch minimum clearance is achieved behind the backside of each bar.

3.02 SURFACE PREPARATION

- A. All exposed reinforcing shall be abrasively cleaned free of bond inhibiting corrosion by sandblasting using oil-free compressed air to achieve a near white metal profile in accordance with NACE-2 / SSPC SP-10.

- B. All exposed and cleaned reinforcing shall be coated with anti-corrosion and bonding agent in accordance with the manufacturer's recommendations.
- C. All existing concrete surfaces to receive new concrete or repair mortar shall be prepared and maintained in a surface saturated dry (SSD) condition up to time of placement.
- D. Forms and excavated concrete areas shall be kept in clean condition, free of debris and standing water.

3.03 REINFORCING DETAILS

- A. Tension bars that exhibit 20% or greater loss of the gross bar section shall be overlap spliced to achieve 48 x bar diameter length with a new bar of the same size.
- B. Dowels into existing concrete shall be set into pre-drilled holes of suitable diameter and depth, 9 x bar diameter minimum, to receive epoxy anchoring adhesive. Rods shall be inserted with a slow twisting action and allowed to cure overnight prior to concrete placement.

3.04 MIXING & PLACEMENT

- A. Mix repair mortars in accordance with the manufacturer's instructions using a low speed drill and mixing paddle in suitable sized container. For extended mixes, the coarse aggregate shall be added last, once a lump free homogenous mixture is achieved.
- B. Vertical and overhead repairs applied by hand with polymer-modified non-sag mortar shall be troweled in place with sufficient pressure to form intimate bond with the existing substrate.
- C. At deep form and pour repair areas, the concrete or repair mortar shall be consolidated to remove entrapped air and evenly distribute the cement paste by means of vibration.

3.05 FINISHING & CURING

- A. Moist cure all repair overlays with wet burlap in accordance with manufacturer's recommendations for particular material.
- B. Repairs of load bearing members that require temporary shoring must reach original design strength or the repair material 7-day strength prior to removing forms and shoring.

3.06 REPAIR LINE ITEM COMPENSATION

- A. Slab Edge & Beam Section Repairs are based on Cubic Feet of void form space.

3.07 QUALITY CONTROL TESTING

- A. The CONTRACTOR will employ a testing laboratory to perform tests and submit reports. Laboratory to be CMEC accredited (Concrete Materials Engineering Council).
- B. Sampling Fresh Mixes:
1. Test Sample Size / Extended Mortar: 3" diameter x 6" high cylinders.
 2. Compressive Strength Tests: ASTM C-39; one set of three (3) cylinders per building; one (1) specimen tested in 3 days, one (1) specimen in 7 days and one (1) specimen in 28 days.
 3. CONTRACTOR will notify testing lab least 24 hours prior to material placement.
- C. Test results will be reported in writing to OWNER'S REPRESENTATIVE within 24 hours after tests. Tests shall contain project identification name and number, date of pour, testing service name, compressive breaking strength and type of break for 3-day, 7-day and 28-day tests for all structures.

END OF SECTION 03 0131

This item has been electronically signed and sealed by Karl F. Hees, P.E. on 11/08/16 using SHA-1 Authorization Code: D7 D2 1B 4B 5C 31 8B 78 CC D0 5E F0 A3 19 50 29 31 D1 4C 59.

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Karl
F.
Hees

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