

## **Solicitation 673-11973**

# **Water Treatment Plant Concrete Restoration (P12170 & 12181)**

**Bid Designation: Public**



**City of Fort Lauderdale**

## Bid 673-11973

### Water Treatment Plant Concrete Restoration (P12170 & 12181)

Bid Number	673-11973
Bid Title	Water Treatment Plant Concrete Restoration (P12170 & 12181)
Bid Start Date	Jul 7, 2017 12:53:05 PM EDT
Bid End Date	Aug 9, 2017 2:00:00 PM EDT
Question & Answer End Date	Aug 2, 2017 5:00:00 PM EDT
Bid Contact	Maureen Lewis Procurement Specialist II Finance 954-828-5239 maureenl@fortlauderdale.gov
Contract Duration	One Time Purchase
Contract Renewal	Not Applicable
Prices Good for	120 days
Pre-Bid Conference	Jul 20, 2017 10:30:00 AM EDT Attendance is optional Location: GTL Wastewater Treatment Plant 1801 Eisenhower Drive Fort Lauderdale, Florida 33316
Bid Comments	<p><b>Sealed bids will be received electronically until 2:00 P.M., local time, on WEDNESDAY, AUGUST 9, 2017, and opened immediately thereafter in the 5th Floor Conference Room, City Hall, 100 North Andrews Avenue, Fort Lauderdale, Florida, 33301, for BID NO., 673-11973, PROJECT NOS., 12170 &amp; 12181, WATER TREATMENT PLANT CONCRETE RESTORATION.</b></p> <p><b>There are no drawing files for these Projects.</b></p> <p><b>This Project is located at The George T. Lohmeyer Wastewater Treatment Plant (GTL), the Fiveash Water Treatment Plant, and the Peele-Dixie Water Treatment Plant, in the City of Fort Lauderdale. The work to be accomplished under this contract includes, but is not limited to, minor repair of deteriorated concrete including repair of rebar, stucco, walkways, slabs, columns, and painting of surfaces.</b></p> <p><b><u>NOTE: Payment on this contract will be made by Visa or MasterCard.</u></b></p> <p><b><u>Licensing Requirements:</u></b> – Possession of a General Contractors License is required for these Projects.</p> <p><b><u>Pre-Bid Meeting &amp; Site Visits:</u></b> - A pre-bid meeting and site visit will be held on THURSDAY, JULY 20, 2017, at 10:00 a.m, local time, at GTL Wastewater Treatment Plant, 1801 Eisenhower Drive, Fort Lauderdale, FL 33316.</p> <p><b><u>Other Site Visits:</u></b></p> <p><b>TUESDAY, JULY 25, 2017, 10:00 a.m, local time</b>  <b>Fiveash Water Treatment Plant</b>  <b>949 NW 38<sup>th</sup> Street</b>  <b>Fort Lauderdale, FL 33309</b></p> <p><b>TUESDAY, JULY 25, 2017, 2:00 P.M., local time</b></p>

Peele-Dixie Water Treatment Plant  
1500 S. State Road 7  
Fort Lauderdale, FL 33312

While attendance is not mandatory, it is strongly suggested that all Contractors attend the pre-proposal conference and site visit since tours at other times might not be available. It will be the sole responsibility of the bidder to inspect the City's facilities and become familiar with the scope of the City's requirements and systems prior to submitting a proposal. No variation in price or conditions shall be permitted based upon a claim of ignorance. Submission of a proposal will be considered evidence that the proposer has familiarized himself with the nature and extent of the work, equipment, materials, and labor required.

It will be the sole responsibility of the bidder to ensure that his bid is submitted prior to the bid opening date and time listed. PAPER BID SUBMITTALS WILL NOT BE ACCEPTED. BIDS MUST BE SUBMITTED ELECTRONICALLY VIA BIDSYNC.COM

Bid Security : A certified check, cashier's check, bank officer's check or bid bond for TEN percent (10%) of the bid amount, made payable to the City of Fort Lauderdale, Florida, shall accompany each proposal.

Bid Bonds:

Bidders can submit bid bonds for projects four different ways.

BidSync allows bidders to submit bid bonds electronically directly through their system using Surety 2000 . For more information on this feature and to access it, contact BIDSYNC customer care department.

Bidders may upload their original executed bid bond on BIDSYNC to accompany their bids with the electronic proposal, and deliver, upon request, the original, signed and sealed hard copy within five (5) business days, with the company name, bid number and title clearly indicated.

Bidders can hand deliver their bid bond in a sealed envelope to the Finance Department, Procurement Services Division, 100 North Andrews Avenue, Room 619, Fort Lauderdale, FL 33301-1016, before time of bid opening, with the company name, bid number and title clearly indicated on the envelope.

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Certified Checks, Cashier's Checks and Bank Drafts

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The City of Fort Lauderdale reserves the right to waive any informality in any or all bids and to reject any or all bids.

For information concerning technical specifications, please utilize the question/answer feature provided by BIDSYNC at [www.bidsync.com](http://www.bidsync.com) . Questions of a material nature must be received prior to the cut-off date specified in the solicitation. Material changes, if any, to the scope of services or bidding procedures, will only be transmitted by written addendum. (See addendum section of BIDSYNC Site). Contractors please note: No part of your bid can be submitted via FAX. No variation in price or conditions shall be permitted based upon a claim of ignorance. Submission of a bid will be considered evidence that the Contractor has familiarized himself with the nature and extent of the work, equipment, materials, and labor required. The entire bid response must be submitted in accordance with all specifications contained in this solicitation.

Information on bid results and projects currently out to bid can be obtained on the City's website – <http://www.fortlauderdale.gov/departments/finance/procurement-services> . For general inquiries, please call

(954) 828-5933.

Added on Jul 19, 2017:

Pre-Bid meeting/site visit time has been changed to **10:30 a.m.** All other terms and conditions remain the same.

Added on Jul 21, 2017:

Pre-Bid meeting Attendance Record added.

Added on Jul 26, 2017:

Pre-bid meeting/site visits Attendance Sheet added.

**Addendum # 1**

Previous Contract Renewal	Not Applicable	New Contract Renewal	Not Applicable
Pre-Bid Conference Changes	Pre-Bid Conference information has changed. Please review all Pre-Bid Conferences.		

**Addendum # 2**

New Documents	P12170 12181.Pre-bid Mtg. Attendance Record.pdf		
Previous Contract Renewal	Not Applicable	New Contract Renewal	Not Applicable

**Addendum # 3**

New Documents	P12170 12181.Pre-bid Mtg. Site Visit Attendance Record.pdf		
Previous Contract Renewal	Not Applicable	New Contract Renewal	Not Applicable

**Item Response Form**

Item **673-11973--01-01 - BASE BID: Wastewater Plant Type 1 Concrete Repair**

Lot Description **BASE BID**

Quantity **200 square foot**

Unit Price

Delivery Location **City of Fort Lauderdale**  
[See ITB Specifications](#)  
 See ITB Specifications  
 Fort Lauderdale FL 33301  
 Qty 200

**Description**

Repair of concrete surfaces at the wastewater treatment plant with no exposed reinforcement including materials, labor, tools, equipment, restoration, painting and all incidentals

Item **673-11973--01-02 - BASE BID: Wastewater Plant Type 2 Concrete Repair**

Lot Description **BASE BID**

Quantity **175 square foot**

Unit Price



Delivery Location **City of Fort Lauderdale**

[See ITB Specifications](#)

See ITB Specifications

Fort Lauderdale FL 33301

Qty 175

#### Description

Repair of concrete surfaces and rebar at the wastewater treatment plant with spalling to the depth of the rebar including materials, labor, tools, equipment, restoration, painting, and all incidentals

Item **673-11973--01-03 - BASE BID: Wastewater Plant Type 3 Concrete Repair**

Lot Description BASE BID

Quantity **100 square foot**

Unit Price

Delivery Location **City of Fort Lauderdale**

[See ITB Specifications](#)

See ITB Specifications

Fort Lauderdale FL 33301

Qty 100

#### Description

Repair of concrete surfaces and rebar at the wastewater treatment plant with spalling and loss of reinforcement steel greater than 20 percent of the cross sectional area including materials, labor, tools, equipment, restoration, painting, and all incidentals

Item **673-11973--01-04 - BASE BID: Wastewater Plant Leak Repair**

Lot Description BASE BID

Quantity **50 linear foot**

Unit Price

Delivery Location **City of Fort Lauderdale**

[See ITB Specifications](#)

See ITB Specifications

Fort Lauderdale FL 33301

Qty 50

#### Description

Repair of leaks in concrete surfaces at the wastewater treatment plant including materials, labor, tools, equipment, restoration, painting, and all incidentals

Item **673-11973--01-05 - BASE BID: Wastewater Plant crack repair**

Lot Description BASE BID

Quantity **50 linear foot**

Unit Price

Delivery Location **City of Fort Lauderdale**

[See ITB Specifications](#)

See ITB Specifications

Fort Lauderdale FL 33301

Qty 50

#### Description

Repair of cracked concrete surfaces at the wastewater treatment plant including materials, labor, tools, equipment, restoration, painting, and all incidentals

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Item	<b>673-11973--01-06 - BASE BID: Wastewater Plant Remove and Replace Concrete Posts</b>
Lot Description	BASE BID
Quantity	<b>2 each</b>
Unit Price	<input type="text"/>
Delivery Location	<b>City of Fort Lauderdale</b>
	<a href="#">See ITB Specifications</a>
	See ITB Specifications
	Fort Lauderdale FL 33301
	<b>Qty 2</b>

**Description**

Removal and replacement of concrete posts at the wastewater treatment plant including materials, labor, tools, equipment, restoration, painting, and all incidentals

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Item	<b>673-11973--01-07 - BASE BID: Water Plant Type 1 Concrete Repair</b>
Lot Description	BASE BID
Quantity	<b>110 square foot</b>
Unit Price	<input type="text"/>
Delivery Location	<b>City of Fort Lauderdale</b>
	<a href="#">See ITB Specifications</a>
	See ITB Specifications
	Fort Lauderdale FL 33301
	<b>Qty 110</b>

**Description**

Repair of concrete surfaces at the water treatment plants with no exposed reinforcement including materials, labor, tools, equipment, restoration, painting and all incidentals

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Item	<b>673-11973--01-08 - BASE BID: Water Plant Type 2 Concrete Repair</b>
Lot Description	BASE BID
Quantity	<b>60 square foot</b>
Unit Price	<input type="text"/>
Delivery Location	<b>City of Fort Lauderdale</b>
	<a href="#">See ITB Specifications</a>
	See ITB Specifications
	Fort Lauderdale FL 33301
	<b>Qty 60</b>

**Description**

Repair of concrete surfaces and rebar at the water treatment plants with spalling to the depth of the rebar including materials, labor, tools, equipment, restoration, painting, and all incidentals

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Item	<b>673-11973--01-09 - BASE BID: Water Plant Type 3 Concrete Repair</b>
Lot Description	BASE BID
Quantity	<b>10 square foot</b>
Unit Price	<input type="text"/>
Delivery Location	<b>City of Fort Lauderdale</b>
	<a href="#">See ITB Specifications</a>
	See ITB Specifications

Fort Lauderdale FL 33301

Qty 10

**Description**

Repair of concrete surfaces and rebar at the water treatment plants with spalling and loss of reinforcement steel greater than 20 percent of the cross sectional area including materials, labor, tools, equipment, restoration, painting, and all incidentals

Item **673-11973--01-10 - BASE BID: Water Plant Leak Repair**Lot Description **BASE BID**Quantity **1700 linear foot**Unit Price Delivery Location **City of Fort Lauderdale**[See ITB Specifications](#)

See ITB Specifications

Fort Lauderdale FL 33301

Qty 1700

**Description**

Repair of leaks in concrete surfaces at the water treatment plants including materials, labor, tools, equipment, restoration, painting, and all incidentals

Item **673-11973--01-11 - BASE BID: Water Plant Crack Repair**Lot Description **BASE BID**Quantity **90 linear foot**Unit Price Delivery Location **City of Fort Lauderdale**[See ITB Specifications](#)

See ITB Specifications

Fort Lauderdale FL 33301

Qty 90

**Description**

Repair of cracked concrete surfaces at the water treatment plants including materials, labor, tools, equipment, restoration, painting, and all incidentals

Item **673-11973--01-12 - BASE BID: Water Plant Expansion Joint Replacement**Lot Description **BASE BID**Quantity **1360 linear foot**Unit Price Delivery Location **City of Fort Lauderdale**[See ITB Specifications](#)

See ITB Specifications

Fort Lauderdale FL 33301

Qty 1360

**Description**

Replacement of expansion joints at the water treatment plants including materials, labor, tools, equipment, restoration, painting, and all incidentals

Item **673-11973--01-13 - BASE BID: Water Plant Stucco Repair**Lot Description **BASE BID**

Quantity **3632 square foot**  
Unit Price   
Delivery Location **City of Fort Lauderdale**  
[See ITB Specifications](#)  
[See ITB Specifications](#)  
Fort Lauderdale FL 33301  
**Qty 3632**

**Description**

Repair of stucco at the water treatment plants including materials, labor, tools, equipment, restoration, painting, and all incidentals

Item **673-11973--01-14 - BASE BID: Water Plant Louver Replacement**  
Lot Description **BASE BID**  
Quantity **1 each**  
Unit Price   
Delivery Location **City of Fort Lauderdale**  
[See ITB Specifications](#)  
[See ITB Specifications](#)  
Fort Lauderdale FL 33301  
**Qty 1**

**Description**

Replacement of louvers at the water treatment plants including materials, labor, tools, equipment, restoration, painting, and all incidentals

Item **673-11973--01-15 - BASE BID: Water Plant Install Flashing**  
Lot Description **BASE BID**  
Quantity **120 linear foot**  
Unit Price   
Delivery Location **City of Fort Lauderdale**  
[See ITB Specifications](#)  
[See ITB Specifications](#)  
Fort Lauderdale FL 33301  
**Qty 120**

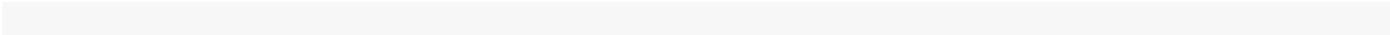
**Description**

Install Flashing at the water treatment plants including materials, labor, tools, equipment, restoration, painting, and all incidentals

Item **673-11973--01-16 - BASE BID: Water Plant Concrete Slab Replacement**  
Lot Description **BASE BID**  
Quantity **170 square foot**  
Unit Price   
Delivery Location **City of Fort Lauderdale**  
[See ITB Specifications](#)  
[See ITB Specifications](#)  
Fort Lauderdale FL 33301  
**Qty 170**

**Description**

Replacement of concrete slabs at the water treatment plants including materials, labor, tools, equipment, restoration, painting, and all incidentals



**CITY OF FORT LAUDERDALE  
CONTRACT AND SPECIFICATIONS PACKAGE**

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**BID NO. 673-11973**

**PROJECT NOS. 12170 & 12181**

**WATER TREATMENT PLANT  
CONCRETE RESTORATION**



**Issued on Behalf of: The Public Works Department  
100 North Andrews Avenue  
Fort Lauderdale, Florida 33301**

**KATHERINE GRIFFITH AND STEVE HILLBERG  
PROJECT MANAGERS II**

**MAUREEN LEWIS, MBA  
PROCUREMENT SPECIALIST II**  
Telephone: (954) 828-5239 E-mail: [maureenl@fortlauderdale.gov](mailto:maureenl@fortlauderdale.gov)

## **TABLE OF CONTENTS**

<b><u>Description</u></b>	<b><u>Pages</u></b>
<b>I. BID INFORMATION</b>	
Invitation to Bid .....	ITB-1 thru ITB-2
Instruction to Bidders .....	IB-1 thru IB-6
Special Conditions .....	SC-1 thru SC-7
<b>II. CONSTRUCTION AGREEMENT (SAMPLE).....</b>	<b>C-1 thru C-40</b>
<b>III. GENERAL CONDITIONS .....</b>	<b>GC-1 thru GC-11</b>
<b>IV. SPECIFICATIONS</b>	
<b>DIVISION 1 – GENERAL REQUIREMENTS</b>	
01001 General Requirements.....	6
01003 Intent of Drawings And Specifications.....	1
01005 Technical Provisions.....	4
01010 Summary of Work.....	6
01025 Measurement and Payment.....	8
01040 Coordination .....	4
01050 Project Management .....	5
01152 Applications for Payment.....	3
01200 Project Meetings.....	3
01310 Project Schedules.....	3
01340 Submittal Procedures .....	7
01400 Quality Control.....	1
01500 Construction Facilities and Temporary Controls	
Supplement 1 - Project Sign Detail.....	5
01505 Mobilization .....	1
01510 Temporary Utilities.....	3
01520 Maintenance of Utility Operations During Construction .....	2
01530 Protection of Existing Facilities .....	2
01560 Temporary Control.....	2
01590 Construction Sign .....	2
01600 Material and Equipment.....	6
01700 Project Closeout .....	4
01720 Project Record Documents.....	2
<b>DIVISION 2 - SITE CONSTRUCTION</b>	
02050 Demolition .....	2
02771 Concrete Curbs And Sidewalks .....	4

## TABLE OF CONTENTS (continued)

<b><u>Description</u></b>	<b><u>Pages</u></b>
<b>DIVISION 3 - CONCRETE</b>	
03100 Concrete Formwork .....	6
03200 Concrete Reinforcement.....	3
03315 Grout .....	2
03350 Concrete Finishes.....	2
03370 Concrete Curing .....	3
03730 Concrete Rehabilitation .....	3
<b>DIVISION 5 – METALS</b>	
05500 Metal Fabrications .....	4
<b>DIVISION 9 – FINISHES</b>	
09220 Portland Cement Plaster (Stucco) .....	4
09810 Exterior Repairs And Waterproofing .....	5
09900 Painting .....	18

**V. EXHIBITS**

- Exhibit 1 - General Repair Details  
 Exhibit 2 – Representative Photographs of repairs needed at Fiveash Water Treatment Plant  
 Exhibit 3 – Representative Photographs of repairs needed at George T. Lohmeyer Wastewater Treatment Plant  
 Exhibit 4 – Representative Photographs of repairs needed at Peele-Dixie Water Treatment Plant

**Note:** The following documents are available electronically for completion and **must** be returned with your bid along with your bid security, proof of insurance, and proof of required licenses/certifications.

Contractor Management Environment Manual (Form 01001A)  
 Contractor Management Environmental Checklist (Form 01001B)  
 CITB Prime Contractor ID Form  
 CITB Questionnaire Sheets  
 CITB Local Business Preference  
 CITB Non-Collusion Statement  
 CITB Contract Payment Method  
 CITB Construction Bid Certification



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## INVITATION TO BID (continued)

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## INVITATION TO BID (continued)

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## **INSTRUCTIONS TO BIDDERS**

The following instructions are given for the purpose of guiding bidders in properly preparing their bids or proposals. These directions have equal force and weight with the specifications and strict compliance is required with all of these provisions.

**QUALIFICATIONS OF BIDDERS** – No proposal will be accepted from, nor will any contract be awarded to, any person who is in arrears to the CITY OF FORT LAUDERDALE, upon any debt or contract, or who has defaulted, as surety or otherwise, upon any obligation to the City, or who is deemed irresponsible or unreliable by the City Commission of Fort Lauderdale.

**PERSONAL INVESTIGATION** - Bidders shall satisfy themselves by personal investigation, and by such other means as they may think necessary or desirable, as to the conditions affecting the proposed work and the cost. No information derived from maps, plans, specifications, or from the Engineer, City Manager, or their assistants shall relieve the Contractor from any risk or from fulfilling all terms of the contract.

**INCONSISTENCIES** – Any seeming inconsistency between different provisions of the plans, specifications, proposal or contract, or any point requiring explanation must be inquired into by the bidder, in writing, at least ten (10) days prior to the time set for opening proposals. After proposals are opened, the bidders shall abide by the decision of the Engineer as to such interpretation.

**ADDENDA AND INTERPRETATIONS** - No interpretations of the meaning of the plans, specifications or other contract documents will be made orally to any bidder. Prospective bidders must request such interpretation in writing as instructed in the bid package. To be considered, such request must be received by the Questions and Answers deadline as indicated in BIDSYNC.COM. Material changes, if any, to the scope of services or bidding procedures will only be transmitted by written addendum. **It is the bidder's responsibility to verify if addendums have been issued in BIDSYNC.COM.** Failure of any bidder to receive any such addenda or interpretation shall not relieve any bidder from any obligation under his bid as submitted. All addenda so issued shall become a part of the contract document. **Bidder** shall verify **in BIDSYNC.COM** that he has all addenda before submitting a bid.

**LEGAL CONDITIONS** - Bidders are notified to familiarize themselves with the provisions of the laws of the State of Florida relating to hours of labor on municipal work, and with the provisions of the laws of the State of Florida and the Charter and the ordinances of the City of Fort Lauderdale.

**PUBLIC ENTITY CRIMES** - A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract 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 Contractor, supplier, subcontractor, 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 Section 287.017, Florida Statutes, for CATEGORY TWO for a period of thirty-six (36) months from the date of being placed on the convicted vendor list.

**FORMS OF PROPOSALS** - Each proposal and its accompanying statements must be made on the blanks provided. **THE FORMS MUST BE SUBMITTED ELECTRONICALLY, IN GOOD ORDER WITH ALL BLANKS COMPLETED,** and must show the name of the bidder and a statement as to its contents.

**INSTRUCTIONS TO BIDDERS (continued)**

**FORMS OF PROPOSALS (CONTINUED)** - The proposal must be signed by one duly authorized to do so, and in case signed by a deputy or subordinate, the principal's properly written authority to such deputy or subordinate must accompany the proposal. No proposal will be accepted, for any reason whatsoever, which is not submitted to the City as stated above, within the specified time.

**INSURANCE** - Contractor shall provide and shall require all of its sub-contractors to provide, pay for, and maintain in force at all times during the term of the Agreement, such insurance, including Property Insurance (Builder's Risk), Commercial General Liability Insurance, Business Automobile Liability Insurance, Workers' Compensation Insurance, Employer's Liability Insurance, and Umbrella/Excess Liability, as stated below. Such policy or policies shall be issued by companies authorized to do business in the State of Florida and having agents upon whom service of process may be made in the State of Florida.

**BID BOND** - A certified check, cashier's check or bank officer's check, for the sum set forth in the advertisement, made payable to the City of Fort Lauderdale, Florida, or bid bond in such amount, shall accompany each proposal as evidence of the good faith and responsibility of the bidder. The check or bond shall be retained by the City as liquidated damages should the bidder refuse to or fail to enter into a contract for the execution of the work embraced in this proposal, in the event the proposal of the bidder is accepted. Retention of such amount shall not be construed as a penalty or forfeiture.

The above bond or check shall be a guarantee that the bidder will, if necessary, promptly execute a satisfactory contract and furnish good and sufficient bonds. As soon as a satisfactory contract has been executed and the bonds furnished and accepted, the check or bond accompanying the proposal of the successful bidder will be returned to him. The certified or other checks or bid bonds of the unsuccessful bidders will be returned to them upon the acceptance of the bid of the successful bidder. If the successful bidder shall not enter into, execute, and deliver such a contract and furnish the required bonds within ten (10) days after receiving notice to do so, the certified or other check or bid bond shall immediately become the property of the City of Fort Lauderdale as liquidated damages. Retention of such amount shall not be construed as a penalty or forfeiture.

**FILLING IN BIDS** - All prices must be electronically submitted in the proposal pages, and all proposals must fully cover all items for which proposals are asked and no other. Bidders are required to state the names and places of residence of all persons interested, and if no other person is interested, the bidder shall distinctly state such fact and shall state that the proposal is, in all respects, fair and without collusion or fraud. Where more than one person is interested, it is required that all persons interested or their legal representative make all verification and subscribe to the proposal.

**PRICES QUOTED:** Deduct any discount offered and quote firm net unit prices. In the case of a discrepancy in computing the amount of the bid, the unit price quoted will govern. All prices quoted shall be F.O.B. destination, freight prepaid (Bidder pays and bears freight charges, Bidder owns goods in transit and files any claims), unless otherwise stated in Special Conditions. Each item must be bid separately. No attempt shall be made to tie any item or items contained in the ITB with any other business with the City.

**BIDS FIRM FOR ACCEPTANCE:** Bidder warrants, by virtue of bidding, that his bid and the prices quoted in his bid will be firm for acceptance by the City for a period of one hundred and twenty (120) days from the date of bid opening unless otherwise stated in the ITB. The City shall award contract within this time period or shall request to the recommended awarded vendor an extension to hold pricing, until products/services have been awarded.

**ADDITIONAL ITEMS OR SERVICES:** The City may require additional items or services of a similar nature, but not specifically listed in the contract. The Contractor agrees to provide such items or

## INSTRUCTIONS TO BIDDERS (continued)

services, and shall provide the City prices on such additional items or services. If the price(s) offered are not acceptable to the City, and the situation cannot be resolved to the satisfaction of the City, the City reserves the right to procure those items or services from other vendors, or to cancel the contract upon giving the Contractor thirty (30) days written notice.

**DELETION OR MODIFICATION OF SERVICES:** The City reserves the right to delete any portion of the Contract at any time without cause, and if such right is exercised by the City, the total fee shall be reduced in the same ratio as the estimated cost of the work deleted bears to the estimated cost of the work originally planned. If work has already been accomplished on the portion of the Contract to be deleted, the Contractor shall be paid for the deleted portion on the basis of the estimated percentage of completion of such portion.

If the Contractor and the City agree on modifications or revisions to the task elements, after the City has approved work to begin on a particular task or project, and a budget has been established for that task or project, the Contractor will submit a revised budget to the City for approval prior to proceeding with the work.

**CAUSES FOR REJECTION** - No proposal will be canvassed, considered or accepted which, in the opinion of the City Commission, is informal or unbalanced, or contains inadequate or unreasonable prices for any items; each item must carry its own proportion of the cost as nearly as is practicable. Any alteration, erasure, interlineation, or failure to specify bids for all items called for in the schedule shall render the proposal informal.

**REJECTION OF BIDS** - The City reserves the right to reject any bid if the evidence submitted by the bidder, or if the investigation of such bidder, fails to satisfy the City that such bidder is properly qualified to carry out the obligations and to complete the work contemplated. Any or all proposals will be rejected, if there is reason to believe that collusion exists among bidders. A proposal will be considered irregular and may be rejected, if it shows serious omissions, alterations in form, additions not called for, conditions or unauthorized alternates, or irregularities of any kind. The City reserves the right to reject any or all proposals and to waive such technical errors as may be deemed best for the interests of the City.

**BID PROTEST PROCEDURE:** Any proposer or bidder who is not recommended for award of a contract and who alleges a failure by the City to follow the City's procurement ordinance or any applicable law may protest to the Procurement Division – Deputy Director of Finance, by delivering a letter of protest within five (5) days after a Notice of Intent to award is posted on the City's website at the following link: [http://www.fortlauderdale.gov/purchasing/notices\\_of\\_intent.htm](http://www.fortlauderdale.gov/purchasing/notices_of_intent.htm). The complete protest ordinance may be found on the City's website at the following link: <http://www.fortlauderdale.gov/purchasing/protestordinance.pdf>

**WITHDRAWALS** - Any bidder may, without prejudice to himself, withdraw his proposal at any time prior to the expiration of the time during which proposals may be submitted. Such request for withdrawal must be in writing and signed in the same manner and by the same person who signed the proposal. After expiration of the period for receiving proposals, no proposal can be withdrawn, modified, or explained.

**CONTRACT** - The bidder to whom award is made shall execute a written contract to do the work and maintain the same in good repair until final acceptance by the proper authorities, and shall furnish

## INSTRUCTIONS TO BIDDERS (continued)

good and sufficient bonds as specified within ten (10) days after receiving such contract for execution. If the bidder to whom the first award is made fails to enter into a contract as provided, the award may be annulled and the contract let to the next lowest bidder who is reliable, responsible, and responsive in the opinion of the City Commission, and that bidder shall fulfill every stipulation and obligation as if such bidder were the original party to whom award was made.

The contract shall provide that the Contractor agrees to correct any defective or faulty work or material, which may appear within one (1) year after completion of the work and receipt of final payment.

**ENFORCEMENT OF SPECIFICATIONS** - Copies of the specifications will be placed in the hands of all the assistants to the Engineer and Inspectors employed on the work, who shall enforce each and every requirement of the contract. Such assistants shall have no authority to vary from such requirements.

**COPIES OF DRAWING PLANS** - Copies of the drawing plans are on file in the Public Works Department, City Hall, 4<sup>th</sup> Floor, 100 N. Andrews Avenue, Fort Lauderdale, Florida 33301.

**SURETY BOND** – The Contractor shall execute and record in the public records of Broward County, Florida, a payment and performance bond in an amount at least equal to the Contract Price with a surety insurer authorized to do business in the State of Florida as surety, ("Bond"), in accordance with Section 255.05, Florida Statutes (2014), as may be amended or revised, as security for the faithful performance and payment of all of the Contractor's obligations under the Contract Documents.

The successful bidder shall furnish a performance and payment bond in compliance with Section 255.05, Florida Statutes, written by a Corporate Surety company, holding a Certificate of Authority from the Secretary of the Treasury of the United States as acceptable sureties on federal bonds, in an amount equal to the total amount payable by the terms of the contract, executed and issued by a Resident Agent licensed by and having an office in the State of Florida, representing such Corporate Surety, conditioned for the due and faithful performance of the work, and providing in addition to all other conditions, that if the Contractor, or his or its subcontractors, fail to duly pay for any labor, materials, or other supplies used or consumed by such Contractor, or his or its subcontractor or subcontractors, in performance of the work contracted to be done, the Surety will pay the same in the amount not exceeding the sum provided in such bonds, together with interest at the rate of fifteen percent (15%) per annum, and that they shall indemnify and save harmless the City of Fort Lauderdale to the extent of any and all payments in connection with carrying out of the contract, which the City may be required to make under the law.

The Contractor is required at all times to have a valid surety bond in force covering the work being performed. A failure to have such bond in force at any time shall constitute a default on the part of the Contractor. A bond written by a surety, which becomes disqualified to do business in the State of Florida, shall automatically constitute a failure on the part of the Contractor to meet the above requirements.

Such bond shall continue in effect for one (1) year after completion and acceptance of the work with liability equal to at least twenty-five percent (25%) of contract price, or an additional bond shall be conditioned that the Contractor will correct any defective or faulty work or material which appear within one (1) year after completion of the contract, upon notification by the City, except in contracts which are concerned solely with demolition work, in which cases twenty-five percent (25%) liability will not be applicable.

**AUDIT OF CONTRACTOR'S RECORDS** - Upon execution of the Contract, the City reserves the right to conduct any necessary audit of the Contractor's records. Such an audit, or audits, may be conducted by the City or its representatives at any time prior to final payment, or thereafter, for a

## INSTRUCTIONS TO BIDDERS (continued)

period up to three (3) years. The City may also require submittal of the records from either the Contractor, the Subcontractor, or both. For the purpose of this Section, records shall include all books of account, supporting documents and papers deemed necessary by the City to assure compliance with the contract provisions.

Failure of the Contractor or Subcontractor to comply with these requirements may result in disqualification or suspension from bidding for future contracts or disapproval as a Subcontractor at the option of the City.

The Contractor shall assure that each of its Subcontractors will provide access to its records pertaining to the project upon request by the City.

**PERIODIC ESTIMATE FOR PARTIAL PAYMENT** - After the Contractor has submitted a periodic estimate for partial payment, approved and certified by the Public Works Department, the City shall make payment in the manner provided in the Contract Documents and in accordance with Florida's Prompt Payment Act, Section 218, Florida Statutes.

**RESERVATION FOR AWARD AND REJECTION OF BIDS** - The City reserves the right to accept or reject any or all bids, part of bids, and to waive minor irregularities or variations to specifications contained in bids, and minor irregularities in the bidding process. The City also reserves the right to award the contract on a split order basis, lump sum basis, individual item basis, or such combination as shall best serve the interest of the City. The City reserves the right to make an award to the responsive and responsible bidder whose product or service meets the terms, conditions, and specifications of the ITB and whose bid is considered to best serve the City's interest. In determining the responsiveness of the offer and the responsibility of the Bidder, the following shall be considered when applicable: the ability, capacity and skill of the Bidder to perform as required; whether the Bidder can perform promptly, or within the time specified, without delay or interference; the character, integrity, reputation, judgment, experience and efficiency of the Bidder; the quality of past performance by the Bidder; the previous and existing compliance by the Bidder with related laws and ordinances; the sufficiency of the Bidder's financial resources; the availability, quality and adaptability of the Bidder's supplies or services to the required use; the ability of the Bidder to provide future maintenance, service or parts; the number and scope of conditions attached to the bid.

**MINORITY AND WOMEN BUSINESS ENTERPRISE PARTICIPATION AND BUSINESS** - It is the desire of the City of Fort Lauderdale to increase the participation of minority (MBE) and women-owned (WBE) businesses in its contracting and procurement programs. While the City does not have any preference or set aside programs in place, it is committed **to a policy of equitable participation for these firms**. The City of Fort Lauderdale wants to increase the participation of Minority Business Enterprises (MBE), Women Business Enterprises (WBE), and Small Business Enterprises (SBE) in its procurement activities. If your firm qualifies in accordance with the below definitions please indicate in the space provided in this ITB.

Minority Business Enterprise (MBE) "A Minority Business" is a business enterprise that is owned or controlled by one or more socially or economically disadvantaged persons. Such disadvantage may arise from cultural, racial, chronic economic circumstances or background or other similar cause. Such persons include, but are not limited to: Blacks, Hispanics, Asian Americans, and Native Americans.

The term "Minority Business Enterprise" means a business at least fifty-one percent (51%) of which is owned by minority group members or, in the case of a publicly owned business, at least fifty-one percent (51%) of the stock of which is owned by minority group members. For the purpose of the preceding sentence, minority group members are citizens of the United States who include, but are not limited to: Blacks, Hispanics, Asian Americans, and Native Americans.



**INSTRUCTIONS TO BIDDERS (continued)**

Women Business Enterprise (WBE) a "Women Owned or Controlled Business" is a business enterprise at least fifty-one percent (51%) of which is owned by females or, in the case of a publicly owned business, at least fifty-one percent (51%) of the stock of which is owned by females.

Small Business Enterprise (SBE) "Small Business" means a corporation, partnership, sole proprietorship, or other legal entity formed for the purpose of making a profit, which is independently owned and operated, has either fewer than 100 employees or less than \$1,000,000 in annual gross receipts.

BLACK includes persons having origins in any of the Black racial groups of Africa.

WHITE includes persons whose origins are Anglo-Saxon and Europeans and persons of Indo-European decent including Pakistani and East Indian.

HISPANIC includes persons of Mexican, Puerto Rican, Cuban, Central and South American, or other Spanish culture or origin, regardless of race.

NATIVE AMERICAN includes persons whose origins are American Indians, Eskimos, Aleuts, or Native Hawaiians.

ASIAN AMERICAN includes persons having origin in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands.

**DEBARRED OR SUSPENDED BIDDERS OR PROPOSERS** - The bidder or proposer certifies, by submission of a response to this solicitation, that neither it nor its principals and subcontractors are presently debarred or suspended by any Federal department or agency.

**LOBBYING ACTIVITIES** - **ALL CONTRACTORS PLEASE NOTE:** Any contractor submitting a response to this solicitation must comply, if applicable, with City of Fort Lauderdale Ordinance No. C-00-27 & Resolution No. 07-101, Lobbying Activities. Copies of Ordinance No., C-00-27, and Resolution No. 07-101, may be obtained from the City Clerk's Office on the 7th Floor of City Hall, 100 N. Andrews Avenue, Fort Lauderdale, Florida 33301. The ordinance may also be viewed on the City's website at [http://www.fortlauderdale.gov/clerk/LobbyistDocs/lobbyist\\_ordinance.pdf](http://www.fortlauderdale.gov/clerk/LobbyistDocs/lobbyist_ordinance.pdf).

## PROJECT 12170 &amp; 12181

**SPECIAL CONDITIONS****01. PURPOSE**

The City of Fort Lauderdale, Florida (City) is seeking bids from qualified bidders, hereinafter referred to as the Contractor, to provide concrete restoration services for the City's Public Works Department, in accordance with the terms, conditions, and specifications contained in this Invitation To Bid (ITB).

**02. TRANSACTION FEES**

The City of Fort Lauderdale uses BidSync ([www.bidsync.com](http://www.bidsync.com)) to distribute and receive bids and proposals. There is no charge to vendors/contractors to register and participate in the solicitation process, nor will any fees be charged to the awarded contractor.

**03. SUBMISSION OF BIDS**

It is the sole responsibility of the Contractor to ensure that their bid is submitted electronically through BidSync at [www.bidsync.com](http://www.bidsync.com) and that any bid security not submitted via BidSync reaches the City of Fort Lauderdale City Hall, Procurement Services Division, 6<sup>th</sup> floor, Room 619, 100 N. Andrews Avenue, Fort Lauderdale, FL 33301 in a sealed envelope marked on the outside with the ITB solicitation number and Contractor's name, no later than the time and date specified in this solicitation. **PAPER BID SUBMITALS WILL NOT BE ACCEPTED. PLEASE SUBMIT YOUR BID RESPONSE ELECTRONICALLY.**

**04. INFORMATION OR CLARIFICATION**

For information concerning procedures for responding to this solicitation, contact **Maureen Lewis, Procurement Specialist II**, at (954) 828-5239 or email at [maureenl@fortlauderdale.gov](mailto:maureenl@fortlauderdale.gov). Such contact shall be for clarification purposes only.

For information concerning technical specifications please utilize the question/answer feature provided by BidSync at [www.bidsync.com](http://www.bidsync.com). Questions of a material nature must be received prior to the cut-off date specified in the solicitation. Material changes, if any, to the scope of services or bidding procedures will only be transmitted by written addendum. (See addendum section of BidSync Site). **Contractors please note:** No part of your bid can be submitted via FAX. No variation in price or conditions shall be permitted based upon a claim of ignorance. Submission of a bid will be considered evidence that the Contractor has familiarized himself with the nature and extent of the work, and the equipment, materials, and labor required. The entire bid response must be

## SPECIAL CONDITIONS (continued)

## PROJECT 12170 &amp; 12181

submitted in accordance with all specifications contained in this solicitation. The questions and answers submitted in BidSync shall become part of any contract that is created from this ITB.

**05. CONTRACT TIME**

- 5.1 The Contractor recognizes that TIME IS OF THE ESSENCE. The Work shall commence within **14** calendar days of the date of the Notice to Proceed.
- 5.2 The Work shall be Substantially Completed within **150** calendar days after the date when the Contract Time commences to run as provided in the Notice to Proceed.
- 5.3 The Work shall be finally completed on the Final Completion Date and ready for final payment in accordance with this Agreement within **180** calendar days after the date when the Contract Time commences to run as provided in the Notice to Proceed.

**Substantial Completion:** Substantial Completion shall mean the date certified by the CITY, in writing when construction is sufficiently complete, in accordance with the Contract Documents, so the CITY can occupy or utilize the work (or portion thereof) for the use for which it is intended. Substantial Completion shall also include the following:

- a) Complete installation, testing and acceptance by the Owner of work described in Contract Documents.
- b) Record Drawing redlines received and accepted by the ENGINEER.
- c) Delivery and acceptance by the OWNER of all spare parts and special tools required by the Contract Documents.

The City of Fort Lauderdale reserves the right to waive any informality in any bid and to reject any or all bids. The City of Fort Lauderdale reserves the right to reduce or delete any of the bid items.

**At time of award of contract, the City reserves the right to set a maximum dollar limit that may be expended on this project. Contract quantities of any or all items may be increased, reduced, or eliminated to adjust the contract amount to coincide with the amount of work necessary or to bring the contract value to within the established limit. All quantities are estimated and the City reserves the right to increase, reduce, or eliminate the contract quantities in any amount.**

**The undersigned bidder affirms that he has or will obtain all equipment necessary to complete the work described, that he has or will obtain all required permits and licenses**

## SPECIAL CONDITIONS (continued)

## PROJECT 12170 &amp; 12181

from the appropriate agencies, and that his firm is authorized to do business in the State of Florida.

**06. BID SECURITY**

A certified check, cashier's check, bank officer's check or bid bond for **TEN** percent **(10%)** of the bid amount, made payable to the City of Fort Lauderdale, Florida, shall accompany each proposal.

**07. REQUIRED LICENSES/CERTIFICATIONS**

Contractor must possess the following licenses/certifications to be considered for award.

**General Contractor's License**

*Note: Contractor **must** have proper licensing and be able to provide evidence of same, if requested, at time of award.*

**08. SPECIFIC EXPERIENCE REQUIRED**

The following expertise is required to be considered for this contract. Specific references attesting to this expertise must be submitted with bid.

The contractor shall have previous construction experience performing concrete repairs, in the State of Florida within the last ten (10) years. Bidder shall submit proof of construction experience for a minimum of three (3) projects of similar scope and scale (or larger) and shall, for each project listed, identify location; dates of construction; project name and overall scope; scope of work that was self-performed by Contractor; and client's name, address, telephone number and e-mail address.

**NOTE: REFERENCES SHOULD NOT INCLUDE CITY OF FORT LAUDERDALE EMPLOYEES OR WORK PERFORMED FOR THE CITY. THE CITY IS INTERESTED IN WORK EXPERIENCE AND REFERENCES FROM ENTITIES OTHER THAN THE CITY OF FORT LAUDERDALE.**

*By signing this bid solicitation, contractor is affirming that this expertise will be provided for this contract at no additional charge.*

**09. BID ALLOWANCE – N/A**

## SPECIAL CONDITIONS (continued)

## PROJECT 12170 &amp; 12181

**10. INSURANCE REQUIREMENTS** *(See Article 10, Bonds and Insurance, of the Contract for details)***10.1 General Information**

Contractor shall provide and shall require all of its sub-contractors to provide, pay for, and maintain in force at all times during the term of the Agreement, such insurance, including Property Insurance (Builder's Risk), Commercial General Liability Insurance, Business Automobile Liability Insurance, Workers' Compensation Insurance, Employer's Liability Insurance, and Umbrella/Excess Liability, as stated below, as well as Professional Liability insurance in the amount of \$1,000,000 for any Architectural and/or Engineering requirements associated with the fulfillment of the contract if required. Such policy or policies shall be issued by companies authorized to do business in the State of Florida and having agents upon whom service of process may be made in the State of Florida. **A Sample Insurance Certificate shall be included with the proposal to demonstrate the firm's ability to comply with insurance requirements. Provide a previous certificate or other evidence listing the insurance companies' names for all required coverage, and the dollar amounts of the coverage.**

- a) The City is required to be named as additional insured on the Commercial General Liability insurance policy. **BINDERS ARE UNACCEPTABLE.** The insurance coverage required shall include those classifications, as listed in standard liability insurance manuals, which most nearly reflect the operations of the Contractor. Any exclusions or provisions in the insurance maintained by the Contractor that precludes coverage for the work contemplated in this Agreement shall be deemed unacceptable, and shall be considered a breach of contract.
- b) The Contractor shall provide the City an original Certificate of Insurance for policies required by Article 10. All certificates shall state that the City shall be given ten (10) days' notice prior to expiration or cancellation of the policy. The insurance provided shall be endorsed or amended to comply with this notice requirement. In the event that the insurer is unable to accommodate, it shall be the responsibility of the Contractor to provide the proper notice. Such notification will be in writing by registered mail, return receipt requested and addressed to the Finance Department. Such policies shall: (1) name the insurance company or companies affording coverage acceptable to the City, (2) state the effective and expiration dates of the policies, (3) include special endorsements where necessary. Such policies provided under Article 10 shall not be affected by any other policy of insurance, which the City may carry in its own name.
- c) Contractor shall, as a condition precedent of this Agreement, furnish to the City of Fort Lauderdale, c/o Project Manager, 100 N. Andrews Avenue, Fort Lauderdale, FL 33301, Certificate(s) of Insurance upon execution of this Agreement, which indicate that insurance coverage has been obtained which meets the requirements as outlined below:

## SPECIAL CONDITIONS (continued)

## PROJECT 12170 &amp; 12181

10.2 Property Insurance (Builder's Risk): - N/A10.3 Commercial General Liability:a) Limits of Liability:

Bodily Injury and Property Damage - Combined Single Limit	
Each Occurrence	\$1,000,000
Project Aggregate	\$1,000,000
General Aggregate	\$2,000,000
Personal Injury	\$1,000,000
Products/Completed Operations	\$1,000,000

b) Endorsements Required:

City of Fort Lauderdale included as an Additional Insured  
 Broad Form Contractual Liability  
 Waiver of Subrogation  
 Premises/Operations  
 Products/Completed Operations  
 Independent Contractors  
 Owners and Contractors Protective Liability  
 Contractor's Pollution Liability – **N/A**

10.4 Business Automobile Liabilitya) Limits of Liability:

Bodily Injury and Property Damage - Combined Single Limit	
All Autos used in completing the contract	
Including Hired, Borrowed or Non-Owned Autos	
Any One Accident	\$1,000,000

b) Endorsements Required:

Waiver of Subrogation

10.5 Workers' Compensation and Employer's Liability Insurance

## Limits:

Workers' Compensation – Per Florida Statute 440  
 Employers' Liability - \$500,000

Any firm performing work on behalf of the City of Fort Lauderdale must provide Workers' Compensation insurance. Exceptions and exemptions can only be made if they are in accordance with Florida Law.

Contractor must be in compliance with all applicable State and Federal workers' compensation laws, including the U.S. Longshore Harbor Workers' Act or Jones Act.

## SPECIAL CONDITIONS (continued)

## PROJECT 12170 &amp; 12181

10.6 **Umbrella/Excess Liability:** The Contractor shall provide umbrella/excess coverage with limits of no less than \$2,000,000 excess of Commercial General Liability, Automobile Liability and Employer's Liability.

10.7 All insurance policies required above shall be issued by companies authorized to do business under the laws of the State of Florida, with the following qualifications:

The Contractor's insurance must be provided by an A.M. Best's "A-" rated or better insurance company authorized to issue insurance policies in the State of Florida, subject to approval by the City's Risk Manager. Any exclusions or provisions in the insurance maintained by the Contractor that precludes coverage for work contemplated in this project shall be deemed unacceptable, and shall be considered breach of contract.

**NOTE: CITY PROJECT NUMBER AND NAME MUST APPEAR ON EACH CERTIFICATE.**

**A Sample Insurance Certificate shall be included with the proposal to demonstrate the firm's ability to comply with insurance requirements. Provide a previous certificate or other evidence listing the insurance companies' names for all required coverage, and the dollar amounts of the coverage.**

Compliance with the foregoing requirements shall not relieve the Contractor of their liability and obligation under this section or under any other section of this Agreement.

The Contractor shall be responsible for assuring that the insurance certificates required in conjunction with this Section remain in force for the duration of the Project. If insurance certificates are scheduled to expire during the contractual period, the Contractor shall be responsible for submitting new or renewed insurance certificates to the City at a minimum of thirty (30) calendar days in advance of such expiration. In the event that expired certificates are not replaced with new or renewed certificates that cover the contractual period, the City shall:

- a) Suspend the Agreement until such time as the new or renewed certificates are received by the City.
- b) The City may, at its sole discretion, terminate the Agreement for cause and seek damages from the Contractor in conjunction with the violation of the terms and conditions of the Agreement.

11. **PERFORMANCE AND PAYMENT BOND:** 100%

**Number of awards anticipated:** 1

## SPECIAL CONDITIONS (continued)

PROJECT 12170 &amp; 12181

**12. CITY PROJECT MANAGER**

The Project Managers are hereby designated by the City as **Katherine Griffith** (GTL) and **Steve Hillberg** (Fiveash and Peele-Dixie), whose address is **100 N. Andrews Avenue, 4<sup>th</sup> Floor, Fort Lauderdale, FL 33301**, telephone numbers: **(954) 828-6126 and 5976, respectively**, and email addresses are **[kgriffith@fortlauderdale.gov](mailto:kgriffith@fortlauderdale.gov) and [shillberg@fortlauderdale.gov](mailto:shillberg@fortlauderdale.gov)**. The Project Manager will assume all duties and responsibilities and will have the rights and authorities assigned to the Project Manager in the Contract Documents in connection with completion of the Work in accordance with this Agreement.

**13. LIQUIDATED DAMAGES** *(See Article 16, Liquidated Damages, of the Contract for details)*

Upon failure of the Contractor to complete the Work within the time specified for completion, the Contractor shall pay to the City the sum of **Two Hundred and Fifty Dollars (\$250.00)** for each and every calendar day that the completion of the Work is delayed beyond the time specified in this Agreement for completion, as fixed and agreed liquidated damages and not as a penalty, so long as the delay is caused by the Contractor. (See Article 16, Liquidated Damages Clause, of the Contract)

**14. PAYMENT** *(See Article 7, Payment, of the Contract for other details)*

The City has implemented a Purchasing Card (P-Card) Program utilizing both VISA and MASTERCARD networks. Purchases from this contract will be made utilizing the City's Purchasing Card. Contractor will receive payment from the purchasing card in the same manner as other credit card purchases. Accordingly, bidders must presently have the ability to accept these credit cards or take whatever steps necessary to implement the ability before the start of the contract term, or contract award by the City. The City reserves the right to revise this program as necessary.

**15. WORK SCHEDULE (including overtime hours):** Regular

Regular work hours: **8:00 am to 5:00 pm, Monday through Friday.**

City Inspector Hours: **8:00 am to 4:30 pm, Monday through Friday.**

Any inspection requested by the contractor outside those hours will be considered overtime to be paid by the Contractor.

**16. INSPECTION OVERTIME COST:** \$219.00



**CITY OF FORT LAUDERDALE  
CONSTRUCTION AGREEMENT**

THIS AGREEMENT made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between the City of Fort Lauderdale, a Florida municipal corporation (City) and \_\_\_\_\_, (Contractor), (parties);

WHEREAS, the City desires to retain a contractor for the Project as expressed in its Invitation to Bid No., \_\_\_\_\_, Project Number, \_\_\_\_\_, which was opened on \_\_\_\_\_; and,

WHEREAS, the Contractor has expressed its willingness and capability to perform the necessary work to accomplish the Project.

NOW, THEREFORE, the City and the Contractor, in consideration of the mutual covenants and conditions contained herein and for other good and valuable consideration, the receipt and sufficiency is hereby acknowledged, agree as follows:

**ARTICLE 1 – DEFINITIONS**

Whenever used in this Agreement or in other Contract Documents, the following terms have the meanings indicated which are applicable to both the singular and plural forms:

- 1.1 Agreement – This written Agreement between the City and the Contractor covering the work to be performed including other Contract Documents that are attached to or incorporated in the Agreement.
- 1.2 Application for Payment – The form accepted by the City which is to be used by the Contractor in requesting progress or final payment and which is to include such supporting documentation as is required by the Contract Documents.
- 1.3 Approve – The word approve is defined to mean review of the material, equipment or methods for general compliance with design concepts and with the information given in the Contract Documents. It does not imply a responsibility on the part of the City to verify in every detail conformance with plans and specifications.
- 1.4 Bid – The offer or Bid of the Contractor submitted on the prescribed form setting forth the total prices for the Work to be performed.
- 1.5 Bid Documents – This Agreement, advertisement for Invitation to Bids, the Instructions to Bidders, the Bid Form (with supplemental affidavits and agreements), the Contract Forms, General Conditions, the Supplementary Conditions, the Specifications, and the Plans, which documents all become an integral part of the Contract Documents.
- 1.6 Certificate of Substantial Completion - Certificate provided by the City certifying that all Work, excluding the punch list items, has been completed, inspected, and accepted by the City.

- 1.7 Change Order - A change order is defined as a written order to a contractor approved by the City, authorizing a revision of an underlying agreement between the City and a contractor that is directly related to the original scope of work or an adjustment in the original contract price or the contract time directly related to the original scope of work, issued on or after the effective date of the contract.
- 1.8 City – The City of Fort Lauderdale, Florida, including but not limited to its employees, agents, officials, representatives, contractors, subcontractors, volunteers, successors and assigns, with whom the Contractor has entered into the Agreement and for whom the Work is to be provided.
- 1.9 Contract Documents – The Contract Documents shall consist of this Agreement, Exhibits to this Agreement, Public Construction Bond, Performance Bond, Payment Bond and Certificates of Insurance, Notice of Award and Notice to Proceed, General Conditions as amended by the Special Conditions, Technical Specifications, Plans/Drawings, Addenda, Bid Form and supplement Affidavits and Agreements, all applicable provisions of State and Federal Law and any modification, including Change Orders or written amendments duly delivered after execution of Agreement, Invitation to Bid, Instructions to Bidders and Bid Bond, Contractor's response to the City's Invitation to Bid, Schedule of Completion, Schedule of Values, all amendments, modifications and supplements, change orders and work directive changes issued on or after the Effective Date of the Agreement, as well as any additional documents that are required to be submitted under the Agreement.
- Permits on file with the City and or those permits to be obtained shall be considered directive in nature and will be considered a part of this Agreement. A copy of all permits shall be given to the City for inclusion in the Contract Documents. Terms of permits shall be met prior to acceptance of the Work and release of the final payment.
- 1.10 Contract Price – The monies payable to the Contractor by the City under the Contract Documents and in accordance with the line item unit prices listed in the Bid.
- 1.11 Contract Time – The number of calendar days stated in the Agreement for the completion of the Work. The dates on which the work shall be started and shall be completed as stated in the Notice to Proceed.
- 1.12 Contractor – The person, firm, company, or corporation with whom the City has entered into the Agreement, including but not limited to its employees, agents, representatives, contractors, subcontractors, their subcontractors and their other successors and assigns.
- 1.13 Day – A calendar day of twenty-four (24) hours ending at midnight.
- 1.14 Defective – An adjective which when modifying the word "Work" refers to work that is unsatisfactory, faulty, or deficient, or does not conform to the Contract Documents or does not meet the requirements of any inspection, test or approval referred to in the Contract Documents, or has been damaged prior to the Project Manager's recommendation of final payment.

- 1.15 Effective Date of the Agreement – The effective date of the agreement shall be the date the City Commission approves the work. The contractor shall provide all required payment and performance bonds and insurances to the City within ten (10) calendar days following the City Commission approval. Upon verification of all bonds and insurances, the City will issue a notice to proceed (NTP) to the Contractor. Contract time will commence on the date when the Notice to Proceed is issued. The Contractor shall commence the work immediately upon receipt of the Notice to Proceed. Failure of the contractor to proceed with the work will constitute non-performance of the Contractor and would be ground for termination of the contract per ARTICLE 17 of the Agreement.
- 1.16 Final Completion Date – The date the Work is completed, including completion of the final punch list, and delivered along with those items specified in the Contract Documents and is accepted by the City.
- 1.17 Hazardous Materials (HAZMAT) - Any solid, liquid, or gaseous material that is toxic, flammable, radioactive, corrosive, chemically reactive, or unstable upon prolonged storage in quantities that could pose a threat to life, property, or the environment defined in Section 101(14) of Comprehensive Environmental Response, Compensation and Liability Act of 1980 and in 40 CFR 300.6. Also defined by 49 CFR 171.8 as a substance or material designated by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce and which has been so designated.
- 1.18 Hazardous Substance - As defined by Section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act; any substance designated pursuant to Section 311(b) (2) (A) of the Clean Water Act; any element, compound, mixture, solution or substance designated pursuant to Section 102 identified under or listed pursuant to Section 3001 of the Solid Waste Disposal Act {but not including any waste listed under Section 307[a] of the Clean Water Act}; any hazardous air pollutant listed under Section 112 of the Clean Air Act; and any imminently hazardous chemical substance or mixture pursuant to Section 7 of the Toxic Substances Control Act. The term does not include petroleum, including crude oil or any fraction thereof, which is not otherwise specifically listed or designated as a hazardous substance in the first sentence of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).
- 1.19 Hazardous Waste - Those solid wastes designated by OSHA in accordance with 40 CFR 261 due to the properties of ignitability, corrosivity, reactivity, or toxicity. Any material that is subject to the Hazardous Waste Manifest requirements of the EPA specified in 40 CFR Part 262.
- 1.20 Holidays - Those designated non-work days as established by the City Commission of the City of Fort Lauderdale.
- 1.21 Inspection – The term “inspection” and the act of inspecting as used in this Agreement is defined to mean the examination of construction to ensure that it conforms to the design concept expressed in the plans and specifications. This term shall not be construed to mean supervision, superintending and/or overseeing.

- 1.22 Notice of Award - The written notice by City to the Contractor stating that upon compliance by the Contractor with the conditions precedent enumerated therein, within the time specified that the City will sign and deliver this Agreement.
- 1.23 Notice to Proceed – A written notice given by the City to the Contractor fixing the date on which the Contract Time will commence to run and on which the Contract Time will end.
- 1.24 Plans - The drawings which show the character and scope of the work to be performed and which have been prepared or approved by the City and are referred to in the Contract Documents.
- 1.25 Premises (otherwise known as Site or Work Site) – means the land, buildings, facilities, etc. upon which the Work is to be performed.
- 1.26 Project – The total construction of the Work to be provided as defined in the Contract Documents.
- 1.27 Project Manager - The employee of the City, or other designated individual who is herein referred to as the Project Manager, will assume all duties and responsibilities and will have the rights and authorities assigned to the Project Manager in the contract Documents in connection with completion of the Work in accordance with this Agreement. The Project Manager, or designee, shall be the authorized agent for the City unless otherwise specified.
- 1.28 Punch List - The City's list of Work yet to be done or be corrected by the Contractor, before the Final Completion date can be determined by the City.
- 1.29 Record Documents - A complete set of all specifications, drawings, addenda, modifications, shop drawings, submittals and samples annotated to show all changes made during the construction process.
- 1.30 Record Drawings or "As-Builts" - A set of drawings which show significant changes in the work made during construction and which are usually based on drawings marked up in the field and other data furnished by the contractor. These documents will be signed and sealed by the Engineer of Record or a Professional Land Surveyor licensed in the State of Florida.
- 1.31 Substantially Completed Date – A date when the Contractor has requested in writing, stating that the Work is substantially completed and is ready for an inspection and issuance of a final punch list for the Project.
- 1.32 Work – The entire completed delivered product or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work is the result of performing services, furnishing labor and furnishing and incorporating material and equipment into the product, all as required by the Contract Documents.

## ARTICLE 2 – SCOPE OF WORK

- 2.1 The Contractor shall complete all work as specified or indicated in the Contract Documents. The Project for which the Work under the Contract Documents may be the whole or only part is generally described as follows:

WATER TREATMENT PLANT CONCRETE RESTORATION  
ITB 673-11973 PROJECTS 12170 & 12181

- 2.2 All Work for the Project shall be constructed in accordance with the Drawings and Specifications. The Work generally involves:

### PROJECT DESCRIPTION

This project is located at The George T. Lohmeyer Wastewater Treatment Plant (GTL), the Fiveash Water Treatment Plant, and the Peele-Dixie Water Treatment Plant, in the City of Fort Lauderdale. The work to be accomplished under this contract includes, but is not limited to, minor repair of deteriorated concrete including repair of rebar, stucco, walkways, slabs, columns, and painting of surfaces.

- 2.3 Within ten (10) days of the execution of this Agreement, the Contractor shall submit a Construction Schedule, Schedule of Values and a listing of those subcontractors that will be utilized by the Contractor. The general sequence of the work shall be submitted by the Contractor and approved by the City before any work commences. The City reserves the right to issue construction directives necessary to facilitate the Work or to minimize any conflict with operations.

## ARTICLE 3 – PROJECT MANAGER

- 3.1 The Project Managers are hereby designated by the City as **Katherine Griffith** (GTL) and **Steve Hillberg** (Fiveash and Peele-Dixie), whose address is **100 N. Andrews Avenue, 4<sup>th</sup> Floor, Fort Lauderdale, FL 33301**, telephone numbers: **(954) 828-6126 and 5976, respectively**, and email addresses are **[kgriffith@fortlauderdale.gov](mailto:kgriffith@fortlauderdale.gov)** and **[shillberg@fortlauderdale.gov](mailto:shillberg@fortlauderdale.gov)**. The Project Manager will assume all duties and responsibilities and will have the rights and authorities assigned to the Project Manager in the Contract Documents in connection with completion of the Work in accordance with this Agreement.

## ARTICLE 4 – CONTRACT DOCUMENTS

The Contract Documents which comprise the entire Agreement between the City and Contractor are attached to this Agreement, are made a part hereof and consist of the following:

- 4.1 This Agreement.
- 4.2 The Contract Documents may only be altered, amended, or repealed in accordance with the specific provisions of the terms of this Agreement.
- 4.3 Exhibits to this Agreement: (Plans sheets [ ] to [ ] inclusive).

- 4.4 Public Construction Bond, Performance Bond, Payment Bond and Certificates of Insurance.
- 4.5 Notice of Award and Notice to Proceed.
- 4.6 General Conditions as amended by the Special Conditions.
- 4.7 Technical Specifications.
- 4.8 Plans/Drawings.
- 4.9 Addenda number \_\_\_\_\_ through \_\_\_\_\_, inclusive.
- 4.10 Bid Form and supplement Affidavits and Agreements.
- 4.11 All applicable provisions of State and Federal Law.
- 4.12 Invitation to Bid No., \_\_\_\_\_, Instructions to Bidders, and Bid Bond.
- 4.13 Contractor's response to the City's Invitation to Bid No., \_\_\_\_\_, dated \_\_\_\_\_.
- 4.14 Schedule of Completion and Schedule of Values.
- 4.15 All amendments, modifications and supplements, change orders and work directive changes issued on or after the Effective Date of the Agreement.
- 4.16 Any additional documents that are required to be submitted under the Agreement.
- 4.17 Permits on file with the City and or those permits to be obtained shall be considered directive in nature and will be considered a part of this Agreement. A copy of all permits shall be given to the City for inclusion in the Contract Documents. Terms of permits shall be met prior to acceptance of the Work and release of the final payment.

In the event of any conflict between the documents or any ambiguity or missing specification or instruction, the following priority is established:

- a. Specific direction from the City Manager (or designee).
- b. Approved change orders, addenda or amendments.
- c. Specifications (quality) and Drawings (location and quantity).
- d. Supplemental conditions or special terms.
- e. General Terms and Conditions.
- f. This Agreement dated \_\_\_\_\_ and any attachments.
- g. Invitation to Bid No., \_\_\_\_\_, and the specifications prepared by the City.

- h. Contractor's response to the City's Invitation to Bid No., \_\_\_\_\_, dated \_\_\_\_\_.
- i. Schedule of Values.
- j. Schedule of Completion.

If during the performance of the Work, Contractor finds a conflict, error or discrepancy in the Contract Documents, Contractor shall so report to the Project Manager, in writing, at once and before proceeding with the Work affected shall obtain a written interpretation or clarification from the City.

It is the intent of the specifications and plans to describe a complete Project to be constructed in accordance with the Contract Documents. Any Work that may reasonably be inferred from the specifications or plans as being required to produce the intended result shall be supplied whether or not it is specifically called for. When words which have a well-known technical or trade meaning are used to describe Work, materials, or equipment, such works shall be interpreted in accordance with such meaning. Reference to standard specifications, manuals or codes of any technical society, organization or associations, or to the code of any governmental authority whether such reference be specific or implied, shall mean the latest standard specification, manual or code in effect as of the Effective Date of this Agreement, except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall change the duties and responsibilities of the City, the Contractor, or any of their agents or employees from those set forth in the Contract Documents.

## ARTICLE 5 – CONTRACT TIME

- 5.1 The Contractor recognizes that **TIME IS OF THE ESSENCE**. The Work shall commence within **14** calendar days of the date of the Notice to Proceed.
- 5.2 The Work shall be Substantially Completed within **150** calendar days after the date when the Contract Time commences to run as provided in the Notice to Proceed.
- 5.3 The Work shall be finally completed on the Final Completion Date and ready for final payment in accordance with this Agreement within **180** calendar days after the date when the Contract Time commences to run as provided in the Notice to Proceed.
- 5.4 **Substantial Completion:** Substantial Completion shall mean the date certified by the CITY, in writing when construction is sufficiently complete, in accordance with the Contract Documents, so the CITY can occupy or utilize the work (or portion thereof) for the use for which it is intended. Substantial Completion shall also include the following:
  - a) Complete installation, testing and acceptance by the Owner of work described in Contract Documents.
  - b) Record Drawing redlines received and accepted by the ENGINEER.

- c) Delivery and acceptance by the OWNER of all spare parts and special tools required by the Contract Documents.

## ARTICLE 6 – CONTRACT PRICE

- 6.1 City shall pay Contractor for performance of the Work in accordance with Article 7, subject to additions and deletions by Change Order, as provided for in this Agreement.
- 6.2 The parties expressly agree that the Contract Price, which shall not exceed the amount of \$\_\_\_\_\_, constitutes the total maximum compensation payable to Contractor for performing the Work, plus any Work done pursuant to a Change Order. The Contract Price is in accordance with the line item unit prices listed in the Bid. Line items are based on a unit price cost multiplied by a defined quantity. Any additional duties, responsibilities and obligations assigned to or undertaken by Contractor shall be at Contractor's expense without change to the Contract Price.
- 6.3 The Contract Price constitutes the compensation payable to Contractor for performing the Work plus any Work done pursuant to a Change Order. All duties, responsibilities and obligations assigned to or undertaken by Contractor shall be at Contractor's expense without change in the Contract price.

## ARTICLE 7 – PAYMENT

- 7.1 Contractor shall submit Applications for Payment in accordance with the Contract Documents. Applications for Payment will be processed by City as provided in the General Conditions.
- 7.2 Progress Payments. City shall make progress payments on account of the Contract Price on the basis of Contractor's monthly Applications for Payment, which shall be submitted by the Contractor between the first (1<sup>st</sup>) and the tenth (10<sup>th</sup>) day after the end of each calendar month for which payment is requested. All progress payments will be made on the basis of the progress of the Work completed.
- 7.3 Prior to Final Completion, progress payments will be made in an amount equal to ninety percent (90%) of the value of Work completed less in each case the aggregate of payments previously made.
- 7.4 Final Payment. Upon final completion of the Work in accordance with the General Conditions, as may be supplemented, the City shall pay Contractor an amount sufficient to increase total payments to one-hundred percent (100%) of the Contract Price. However, not less than ten percent (10%) of the Contract Price shall be retained until Record Drawings (as-builts), specifications, addenda, modifications and shop drawings, including all manufacturers' instructional and parts manuals are delivered to and accepted by the City.
- 7.5 City may withhold, in whole or in part, payment to such extent as may be necessary to protect itself from loss on account of:
- 7.5.1 Defective work not remedied.



- 7.5.2 Claims filed or reasonable evidence indicating probable filing of claims by other parties against Contractor or City because of Contractor's performance.
- 7.5.3 Failure of Contractor to make payments properly to Subcontractors or for material or labor.
- 7.5.4 Damage to another contractor not remedied.
- 7.5.5 Liquidated damages and costs incurred by Consultant for extended construction administration, if applicable.
- 7.5.6 Failure of Contractor to provide any and all documents required by the Contract Documents.

When the above grounds are removed or resolved satisfactory to the Project Manager, payment shall be made in whole or in part.

- 7.6 The City shall make payment to the Contractor in accordance with the Florida Prompt Payment Act, Section 218.70, Florida Statutes.
- 7.7 The City shall make payment to the Contractor through utilization of the City's P-Card Program.

## **ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS**

In order to induce the City to enter into this Agreement, Contractor makes the following representations upon which the City has relied:

- 8.1 Contractor is qualified in the field of public construction and in particular to perform the Work and services set forth in this Agreement.
- 8.2 Contractor has visited the Work Site, has conducted extensive tests, examinations and investigations and represents and warrants a thorough familiarization with the nature and extent of the Contract Documents, the Work, locality, soil conditions, moisture conditions and all year-round local weather and climate conditions (past and present), and, in reliance on such tests, examination and investigations conducted by Contractor and the Contractor's experts, has determined that no conditions exist that would in any manner affect the Proposed Price and that the project can be completed for the Proposed Price submitted within the Contract Time as defined in this Agreement. Furthermore, Contractor warrants and confirms that he is totally familiar with, understands and obligates Contractor to comply with all federal, state and local laws, ordinances, rules, regulations and all market conditions that affect or may affect the cost and price of materials and labor needed to fulfill all provisions of this Agreement or that in any manner may affect cost, progress or performance of the Work.
- 8.3 The Contractor has satisfied itself as to the nature and location of the Work under the Contract Documents, the general and local conditions of the Project, particularly those bearing upon availability of transportation, disposal, handling and storage of materials, availability of labor, water, electric power, and roads, the conformation and conditions at the ground based on City provided reports, the type of equipment and facilities needed preliminary to and during the prosecution of the Work and all other matters which can in any way affect the Work or the cost thereof under the Contract Documents.

- 8.4 The Contractor has also studied carefully all reports of investigations and tests of subsurface and latent physical conditions at the site or otherwise affecting cost, progress or performance of the Works, and finds and has further determined that no conditions exist that would in any manner affect the Proposed Price and that the project can be completed for the Proposed Price submitted.
- 8.5 Contractor has made or caused to be made examinations, investigations, tests and studies of such reports and related data in addition to those referred to in Paragraphs 8.2, 8.3 and 8.4 above as he deems necessary for the performance of the Work at the Contract Prices, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents; and no additional examinations, investigations, tests, reports or similar data are, or will be, required by Contractor for such purposes.
- 8.6 Contractor has correlated the results of all such observations, examinations, investigations, tests, reports and data with the terms and conditions of the Contract Documents.
- 8.7 Contractor has given City written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution by City is acceptable to the Contractor.
- 8.8 Labor
- 8.8.1 The Contractor shall provide competent, suitable qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. The Contractor shall at all times maintain good discipline and order at the site.
- 8.8.2 The Contractor shall, at all times, have a competent superintendent, capable of reading and thoroughly understanding the drawings and specifications, as the Contractor's agent on the Work, who shall, as the Contractor's agent, supervise, direct and otherwise conduct the Work.
- 8.8.3 The Contractor shall designate the superintendent on the job to the City, in writing, immediately after receipt of the Notice to Proceed. The Contractor understands and agrees that the superintendent's physical presence on the job site is indispensable to the successful completion of the Work. If the superintendent is frequently absent from the job site, the Project Manager may deliver written notice to the Contractor to stop work or terminate the Contract in accordance with Article 17.
- 8.8.4 The Contractor shall assign personnel to the job site that have successfully completed training programs related to trench safety, confined space and maintenance of traffic. A certified "competent person" shall be assigned to the job site. Personnel certified by the International Municipal Signal Associations with Florida Department of Transportation qualifications are required relative to maintenance of traffic. Failure to pursue the Work with the properly certified supervisory staff may result in notice to stop work or terminate the Contract in accordance with Article 17.

## 8.9 Materials:

8.9.1 The Contractor shall furnish all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water and sanitary facilities and all other facilities and incidentals necessary for the execution, testing, initial operation and completion of Work.

8.9.2 All material and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. Suppliers shall be selected and paid by the Contractor; the City reserves the right to approve all suppliers and materials.

8.10 Work Hours: Except in connection with the safety or protection of persons, or the Work, or property at the site or adjacent thereto, and except as otherwise indicated in the Supplementary Conditions, all work at the site shall be performed during regular working hours between 7 a.m. and 6:00 p.m., Monday through Friday. The Contractor will not permit overtime work or the performance of work on Saturday, Sunday or any legal holiday (designated by the City of Fort Lauderdale) without the Project Manager's written consent at least seventy-two (72) hours in advance of starting such work. If the Project Manager permits overtime work, the Contractor shall pay for the additional charges to the City with respect to such overtime work. Such additional charges shall be a subsidiary obligation of the Contractor and no extra payment shall be made to the Contractor for overtime work. It shall be noted that the City's Inspector work hours are from 8:00 a.m. to 4:30 p.m. and any work requiring inspection oversight being performed outside of this timeframe shall be paid for by the Contractor as Inspector overtime. The cost to the Contractor to reimburse the City for overtime inspection is established at direct-labor and overtime costs for each person or inspector required. Incidental overtime costs for engineering, testing and other related services will also be charged to the Contractor at the actual rate accrued.

8.11 Patent Fee and Royalties: The Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work, or any invention, design, process, product or device which is the subject of patent rights or copyrights held by others. The Contractor hereby expressly binds himself or itself to indemnify and save harmless the City from all such claims and fees and from any and all suits and action of every name and description that may be brought against City on account of any such claims, fees, royalties, or costs for any such invention or patent, and from any and all suits or actions that may be brought against said City for the infringement of any and all patents or patent rights claimed by any person, firm corporation or other entity.

8.12 Permits: The Contractor shall obtain and pay for all permits and licenses. There shall be no allowance for Contractor markup, overhead or profit for permits and licenses. The Contractor shall pay all government charges which are applicable at the time of opening of proposals. It shall be the responsibility of the Contractor to secure and pay for all necessary licenses and permits of a temporary nature necessary for the prosecution of Work.

8.13 Law and Regulations: The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations applicable to the Work. If the Contractor observes that the specifications or plans are at variance therewith, the Contractor shall give the

Project Manager prompt written notice thereof, and any necessary changes shall be adjusted by any appropriate modifications. If the Contractor performs any work knowing or having reason to know that it is contrary to such laws, ordinances, rules and regulations, and without such notice to the Project Manager, the Contractor shall bear all costs arising therefrom; however, it shall not be the Contractor's primary responsibility to make certain that the specifications and plans are in accordance with such laws, ordinances, rules and regulations.

- 8.14 Taxes: The Contractor shall pay all sales, consumer, use and other similar taxes required to be paid by him in accordance with the laws of the City of Fort Lauderdale, County of Broward, State of Florida.
- 8.15 Contractor Use of Premises: The Contractor shall confine construction equipment, the storage of materials and equipment and the operations of workmen to areas permitted by law, ordinances, permits and/or the requirements of the Contract Documents, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment.

The Contractor shall not enter upon private property for any purpose without first securing the permission of the property owner in writing and furnishing the Project Manager with a copy of said permission. This requirement will be strictly enforced, particularly with regard to such vacant properties as may be utilized for storage or staging by the Contractor.

The Contractor shall conduct his work in such a manner as to avoid damage to adjacent private or public property. Any damage to existing structures of work of any kind, including permanent reference markers or property corner markers, or the interruption of a utility service, shall be repaired or restored promptly at no expense to the City or property owner.

The Contractor will preserve and protect all existing vegetation such as trees, shrubs and grass on or adjacent to the site which do not reasonably interfere with the construction, as determined by the Project Manager. The Contractor will be responsible for repairing or replacing any trees, shrubs, lawns and landscaping that may be damaged due to careless operation of equipment, stockpiling of materials, tracking of grass by equipment or other construction activity. The Contractor will be liable for, or will be required to replace or restore at no expense to the City all vegetation not protected or preserved as required herein that may be destroyed or damaged.

During the progress of the work, the Contractor shall keep the premises free from accumulations of waste materials, rubbish and debris resulting from the Work. At the completion of the Work, the Contractor shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery, and surplus materials and shall leave the site clean and ready for occupancy by the City. The Contractor shall restore to their original condition those portions of the site not designated for alteration by the Contract Documents at no cost to the City.

8.16 Project Coordination: The Contractor shall provide for the complete coordination of the construction effort. This shall include, but not necessarily be limited to, coordination of the following:

8.16.1 Flow of material and equipment from suppliers.

8.16.2 The interrelated work with affected utility companies.

8.16.3 The interrelated work with the City where tie-ins to existing facilities are required.

8.16.4 The effort of independent testing agencies.

8.16.5 Notice to affected property owners as may be directed by the Project Manager.

8.17 Project Record Documents and Final As-Builts (Record Drawings): Contractor shall be responsible for maintaining up-to-date redline as-built drawings, on site, at all times during construction. All as-built information shall be surveyed and verified by a professional land surveyor registered in the State of Florida. Contractor shall provide the City with a minimum of three (3) sets of signed and sealed record drawings (Final As-Builts) and a CD of the electronic drawings files created in AutoCad 2014 or later. All costs associated with survey work required for construction layout and as-built preparation shall be the responsibility of the Contractor.

8.18 Safety and Protection:

8.18.1 The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. The Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

8.18.1.1 All employees working on the project and other persons who may be affected thereby.

8.18.1.2 All the Work and all materials or equipment to be incorporated therein, whether in storage on or off the site.

8.18.1.3 Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

8.18.2 The Contractor shall comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. The Contractor shall notify owners of adjacent property and utilities when execution of the Work may affect them at least seventy-two (72) hours in advance (unless otherwise required). All damage, injury or loss to any property caused, directly or indirectly, in whole or in part by the Contractor, any subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, shall be remedied by the Contractor. The Contractor's duties and responsibilities for safety and protection of the Work shall continue until such time as all the Work is completed and accepted by the City.

- 8.19 Emergencies: In emergencies affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, the Contractor, without special instruction or authorization from the City is obligated to act to prevent threatened damage, injury or loss. The Contractor shall give the Project Manager prompt written notice of any significant changes in the Work or deviations from the Contract Documents caused thereby.
- 8.20 Risk of Loss: The risk of loss, injury or destruction shall be on the Contractor until acceptance of the Work by the City. Title to the Work shall pass to the City upon acceptance of the Work by the City.
- 8.21 Environmental: The Contractor has fully inspected the Premises and agrees, except as to the presence of any asbestos, to accept the Premises in an "as is" physical condition, without representation or warranty by the City of any kind, including, without limitation, any and all existing environmental claims or obligations that may arise from the presence of any "contamination" on, in or about the Premises. Further, Contractor and all entitles claiming by, through or under the Contractor, releases and discharges the City, from any claim, demand, or cause of action arising out of or relating to the Contractor's use, handling, storage, release, discharge, treatment, removal, transport, decontamination, cleanup, disposal and/or presence of any hazardous substances including asbestos on, under, from or about the Premises. The Contractor shall have no liability for any pre-existing claims or "contamination" on the Premises.

The Contractor shall not use, handle, store, discharge, treat, remove, transport, or dispose of Hazardous Substances including asbestos at, in, upon, under, to or from the Premises until receipt of instructions from the City. At such time, a City approved Change Order, which shall not include any profit, shall authorize the Contractor to perform such services.

The Contractor shall immediately deliver to the Project Manager complete copies of all notices, demands, or other communications received by the Contractor from any governmental or quasi-governmental authority or any insurance company or board of fire underwriters or like or similar entities regarding in any way alleged violations or potential violations of any Environmental Law or otherwise asserting the existence or potential existence of any condition or activity on the Premises which is or could be dangerous to life, limb, property, or the environment.

For other and additional consideration, the Contractor hereby agrees, at its sole cost and expense, to indemnify and protect, defend, and hold harmless the City and its respective employees, agents, officials, officers, representatives, contractors and subcontractors, successors, and assigns (hereafter the "City") from and against any and all claims, demands, losses, damages, costs, expenses, including but not limited to mitigation, restoration, and natural restoration expenses, liabilities, assessments, fines, penalties charges, administrative and judicial proceedings and orders, judgments, causes of action, in law or in equity, remedial action requirements and/or enforcement actions of any kind (including, without limitation, attorneys' fees and costs) directly or indirectly arising out of or attributable to, in whole or in part, the Contractor's use, handling, storage, release, threatened release, discharge, treatment, removal, transport, decontamination, cleanup, disposal and/or presence of a Hazardous Substance (excluding asbestos) on, under, from, to or about the Premises or any other activity carried on or undertaken on or off the Premises by the Contractor

or its employees, agents or subcontractors, in connection with the use, handling, storage, release, threatened release, discharge, treatment, mitigation, natural resource restoration, removal, transport, decontamination, cleanup, disposal and/or presence or any Hazardous Substance including asbestos located, transported, or present on, undue, from, to, or about the Premises. This indemnity is intended to be operable under 42 U.S.C. sections 9607, as amended, and any successor section.

The scope of the indemnity obligations includes, but is not limited to: (a) all consequential damages; (b) the cost of any required or necessary repair, cleanup, or detoxification of the applicable real estate and the preparation and implementation of any closure, remedial or other required plan, including without limitation; (i) the costs of removal or remedial action incurred by the United States government or the State of Florida or response costs incurred by any other person, or damages from injury to destruction of, or loss of, natural resources, including the cost of assessing such injury, destruction, or loss, incurred pursuant to the Comprehensive Environmental Response, Compensation and Liability Act, as amended; (ii) the clean-up costs, fines, damages, or penalties incurred pursuant to any applicable provisions of Florida law; and (iii) the cost and expenses of abatement, correction or cleanup, fines, damages, response costs, or penalties which arise from the provisions of any other statute, law, regulation, code ordinance, or legal requirement state or federal; and (c) liability for personal injury or property damage arising under any statutory or common law tort theory, including damages assessed for the maintenance of a public private nuisance, response costs, or for the carrying on of an abnormally dangerous activity.

8.22 No Extended Damages: For other and additional good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the Contractor covenants and agrees that in the event of any delay of construction or for any other reason or allegation or claim, and notwithstanding the reason of the delay, reason, claim or allegation or who caused them or the construction delay or whether they were caused by the City, that there will be no entitlement to Contractor to or for any direct or indirect financial damages or losses for extended corporate overhead impact, extended project overhead impacts, project support services, mobilization or demobilization or by whatever other label or legal concept or theory and types of names or labels or basis such claims may have, or any business damages or losses of whatever type or nature, and Contractor hereby waives any right to make any such claim or claims. This provision will have application and effect when construction delays are anticipated and agreed upon by both the City and the Contractor.

8.23 No Liens: If any Subcontractor, supplier, laborer, or materialmen of Contractor or any other person directly or indirectly acting for or through Contractor files or attempts to file a mechanic's or construction lien against the real property on which the work is performed or any part or against any personal property or improvements or claim against any monies due or to become due from the City to Contractor or from Contractor to a Subcontractor, for or on account of any work, labor, services, material, equipment, or other items furnished in connection with the Work or any Change Order, Contractor agrees to satisfy, remove, or discharge such lien or claim at its own expense by bond, payment, or otherwise within twenty (20) days of the filing or from receipt of written notice from the City.

Additionally, until such time as such lien or claim is satisfied, removed or discharged by Contractor, all monies due to Contractor, or that become due to Contractor before

the lien or claim is satisfied, removed or otherwise discharged, shall be held by City as security for the satisfaction, removal and discharge of such lien and any expense that may be incurred while obtaining such. If Contractor shall fail to do so, City shall have the right, in addition to all other rights and remedies provided by this Agreement or by law, to satisfy, remove, or discharge such lien or claim by whatever means City chooses at the entire and sole cost and expense of Contractor which costs and expenses shall, without limitation, include attorney's fees, litigation costs, fees and expenses and all court costs and assessments.

- 8.24 Weather Emergencies: Upon issuance of a Hurricane Watch by the National Weather Service, the Contractor shall submit to the City a plan to secure the work area in the event a Hurricane Warning is issued. The plan shall detail how the Contractor will secure the Premises, equipment and materials in a manner as to prevent damage to the Work and prevent materials and equipment from becoming a hazard to persons and property on and around the Premises. The plan shall include a time schedule required to accomplish the hurricane preparations and a list of emergency contacts that will be available and in the City before, during and immediately after the storm.

Upon issuance of a Hurricane Warning by the National Weather Service, if the Contractor has not already done so, the Contractor shall implement its hurricane preparedness plan. Cost of development and implementation of the hurricane preparedness plan shall be considered as incidental to construction. Cost of any clean up and rework required after the storm will be considered normal construction risk within Florida and shall not entitle the Contractor to any additional compensation. Contractor shall be entitled to request an extension in time for completion of the Work, in accordance with the provisions of Article 15 of this Agreement, equal to the time he is shut down for implementation of the preparedness plan, the duration of the storm and a reasonable period to restore the Premises.

- 8.25 Force Majeure: No Party shall hold the other responsible for damages or for delays in performance caused by force majeure, acts of God, or other acts or circumstances beyond the control of the other party or that could not have been reasonably foreseen and prevented. For this purposes, such acts or circumstances shall include, but not be limited to weather conditions affecting performance, floods, epidemics, war, riots, strikes, lockouts, or other industrial disturbances, or protest demonstrations. Should such acts or circumstances occur, the parties shall use their best efforts to overcome the difficulties arising therefrom and to resume the Work as soon as reasonably possible with the normal pursuit of the Work.

Inclement weather, continuous rain for less than three (3) days or the acts or omissions of subcontractors, third-party contractors, materialmen, suppliers, or their subcontractors, shall not be considered acts of force majeure.

No Party shall be liable for its failure to carry out its obligations under the Agreement during a period when such Party is rendered unable by force majeure to carry out its obligation, but the obligation of the Party or Parties relying on such force majeure shall be suspended only during the continuance of the inability and for no longer period than the unexpected or uncontrollable event.

The Contractor further agrees and stipulates, that its right to excuse its failure to perform by reason of force majeure shall be conditioned upon giving written notice of



its assertion that a Force Majeure delay has commenced within 96 hours after such an occurrence. The CONTRACTOR shall use its reasonable efforts to minimize such delays. The CONTRACTOR shall promptly provide an estimate of the anticipated additional time required to complete the Project.

- 8.26 Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assisted Contracts: The recipient shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of any DOT-assisted contract or in the administration of its DBE program or the requirements of 49 CFR part 26. The recipient shall take all necessary and reasonable steps under 49 CFR part 26 to ensure nondiscrimination in the award and administration of DOT-assisted contracts. The recipient's DBE program, as required by 49 CFR part 26 and as approved by DOT, is incorporated by reference in this agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as a violation of this agreement. Upon notification to the recipient of its failure to carry out its approved program, the Department may impose sanctions as provided for under part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31 U.S.C. 3801 *et seq.*).

Additionally, the contractor assures that they, the sub recipient or the subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate. (This additional language must be included in each subcontract the prime contractor signs with a subcontractor.)

## **ARTICLE 9 – CITY'S RESPONSIBILITIES**

- 9.1 The City shall furnish the data required of the City under the Contract Documents promptly and shall make payments to the Contractor promptly after they are due as provided in Article 7.
- 9.2 The City's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in the Contract Documents.
- 9.3 Technical Clarifications and Interpretations:
- 9.3.1 The City shall issue, with reasonable promptness, such written clarifications or interpretations of the Contract Documents as it may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents. Should the Contractor fail to request interpretation of questionable items in the Contract Documents, the City shall not entertain any excuse for failure to execute the Work in a satisfactory manner.
- 9.3.2 The City shall interpret and decide matters concerning performance under the requirements of the Contract Documents, and shall make decisions on all claims, disputes or other matters in question. Written notice of each claim,

dispute or other matter will be delivered by claimant to the other Party but in no event later than five (5) days after the occurrence of event, and written supporting date will be submitted to the other Party within five (5) days after such occurrence. All written decisions of the City on any claim or dispute will be final and binding.

- 9.4 The Contractor shall perform all Work to the reasonable satisfaction of the City in accordance with the Contract Documents. In cases of disagreement or ambiguity, the City shall decide all questions, difficulties, and disputes of whatever nature, which may arise under or by reason of this Agreement or the quality, amount and value of the Work, and the City's decisions on all claims, questions and determination are final.

## **ARTICLE 10 – BONDS AND INSURANCE**

- 10.1 Public Construction and Other Bonds: The Contractor shall furnish Public Construction or Performance and Payment Bonds ("Bond"), each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all the Contractor's obligations under the Contract Documents. These Bonds shall remain in effect until at least one (1) year after the date of final payment, except as otherwise provided by law. All Bonds shall be furnished and provided by the surety and shall be in substantially the same form as prescribed by the Contract Documents and be executed by such sureties as (i) are licensed to conduct business in the State of Florida, and (ii) are named in the current list of Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts, U.S. Treasury Department and (iii) otherwise meet the requirements set forth herein that apply to sureties. All Bonds signed by an agent must be accompanied by a certified copy of the authority to act.

- 10.1.1 Performance Bond: The Contractor shall execute and record in the public records of Broward County, Florida, a payment and performance bond in an amount at least equal to the Contract Price with a surety insurer authorized to do business in the State of Florida as surety, ("Bond"), in accordance with Section 255.05, Florida Statutes (2014), as may be amended or revised, as security for the faithful performance and payment of all of the Contractor's obligations under the Contract Documents.

A Corporate Surety Bond legally issued, meeting the approval of, and running to the City in an amount not less than the Contract Price of such improvements, conditioned that the Contractor shall maintain and make all repairs to the improvements constructed by the Contractor at their own expense and free of charge to the City, for the period of one (1) year after the date of acceptance of the Work within such period by reason of any imperfection of the material used or by reason of any defective workmanship, or any improper, imperfect or defective preparation of the base upon which any such improvement shall be laid.

- 10.2 Disqualification of Surety: If the Surety on any Bond furnished by the Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in the State of Florida or it ceases to meet the requirements of clauses (i) and (ii) of

10.3 Paragraph 10.1, the Contractor shall within five (5) days thereafter substitute another Bond and Surety, both of which shall be acceptable to the City.

10.4 Insurance

10.3.1 Contractor shall provide and shall require all of its sub-contractors to provide, pay for, and maintain in force at all times during the term of the Agreement, such insurance, including Property Insurance (Builder's Risk), Commercial General Liability Insurance, Business Automobile Liability Insurance, Workers' Compensation Insurance, Employer's Liability Insurance, and Umbrella/Excess Liability, as stated below, as well as Professional Liability insurance in the amount of \$1,000,000 for any Architectural and or Engineering requirements associated with the fulfillment of the contract if required. Such policy or policies shall be issued by companies authorized to do business in the State of Florida and having agents upon whom service of process may be made in the State of Florida. **A Sample Insurance Certificate shall be included with the proposal to demonstrate the firm's ability to comply with insurance requirements. Provide a previous certificate or other evidence listing the insurance companies' names for all required coverage, and the dollar amounts of the coverage.**

- A. The City is required to be named as additional insured on the Commercial General Liability insurance policy. BINDERS ARE UNACCEPTABLE. The insurance coverage required shall include those classifications, as listed in standard liability insurance manuals, which most nearly reflect the operations of the Contractor. Any exclusions or provisions in the insurance maintained by the Contractor that precludes coverage for the work contemplated in this Agreement shall be deemed unacceptable, and shall be considered a breach of contract.
- B. The Contractor shall provide the City an original Certificate of Insurance for policies required by Article 10. All certificates shall state that the City shall be given ten (10) days' notice prior to expiration or cancellation of the policy. The insurance provided shall be endorsed or amended to comply with this notice requirement. In the event that the insurer is unable to accommodate, it shall be the responsibility of the Contractor to provide the proper notice. Such notification will be in writing by registered mail, return receipt requested and addressed to the Finance Department. Such policies shall: (1) name the insurance company or companies affording coverage acceptable to the City, (2) state the effective and expiration dates of the policies, (3) include special endorsements where necessary. Such policies provided under Article 10 shall not be affected by any other policy of insurance, which the City may carry in its own name.
- C. Contractor shall as a condition precedent of this Agreement, furnish to the City of Fort Lauderdale, c/o Project Manager, 100 N. Andrews Avenue, Fort Lauderdale, FL 33301, Certificate(s) of Insurance upon execution of this Agreement, which indicate that insurance coverage has been obtained which meets the requirements as outlined below:

10.3.2 Property Insurance (Builder's Risk): - N/A

10.3.3 Commercial General Liability

- A. Limits of Liability:
- |   |             |
|---|-------------|
| Bodily Injury and Property Damage - Combined Single Limit |             |
| Each Occurrence   | \$1,000,000 |
| Project Aggregate   | \$1,000,000 |
| General Aggregate   | \$2,000,000 |
| Personal Injury   | \$1,000,000 |
| Products/Completed Operations                             | \$1,000,000 |
- B. Endorsements Required:
- City of Fort Lauderdale included as an Additional Insured
  - Broad Form Contractual Liability
  - Waiver of Subrogation
  - Premises/Operations
  - Products/Completed Operations
  - Independent Contractors
  - Owners and Contractors Protective Liability
  - Contractor's Pollution Liability – **N/A**

10.3.4 Business Automobile Liability

- A. Limits of Liability:
- |  |             |
|--|-------------|
| Bodily Injury and Property Damage - Combined Single Limit                              |             |
| All Autos used in completing the contract including Hired, Borrowed or Non-Owned Autos |             |
| Any One Accident   | \$1,000,000 |
- B. Endorsements Required:
- Waiver of Subrogation

10.3.5 Workers' Compensation and Employer's Liability Insurance

Limits: Workers' Compensation – Per Florida Statute 440  
Employers' Liability - \$500,000

Any firm performing work on behalf of the City of Fort Lauderdale must provide Workers' Compensation insurance. Exceptions and exemptions can only be made if they are in accordance with Florida Law.

Contractor must be in compliance with all applicable State and Federal workers' compensation laws, including the U.S. Longshore Harbor Workers' Act or Jones Act.

10.3.6 Umbrella/Excess Liability: The Contractor shall provide umbrella/excess coverage with limits of no less than \$2,000,000 excess of Commercial General Liability, Automobile Liability and Employer's Liability.

- 10.3.7 All insurance policies required above shall be issued by companies authorized to do business under the laws of the State of Florida, with the following qualifications:

The Contractor's insurance must be provided by an A.M. Best's "A-" rated or better insurance company authorized to issue insurance policies in the State of Florida, subject to approval by the City's Risk Manager. Any exclusions or provisions in the insurance maintained by the Contractor that precludes coverage for work contemplated in this project shall be deemed unacceptable, and shall be considered breach of contract.

NOTE: CITY PROJECT NUMBER MUST APPEAR ON EACH CERTIFICATE.

**A Sample Insurance Certificate shall be included with the proposal to demonstrate the firm's ability to comply with insurance requirements. Provide a previous certificate or other evidence listing the insurance companies' names for all required coverage, and the dollar amounts of the coverage.**

Compliance with the foregoing requirements shall not relieve the Contractor of their liability and obligation under this section or under any other section of this Agreement.

The Contractor shall be responsible for assuring that the insurance certificates required in conjunction with this Section remain in force for the duration of the Project. If insurance certificates are scheduled to expire during the contractual period, the Contractor shall be responsible for submitting new or renewed insurance certificates to the City at a minimum of thirty (30) calendar days in advance of such expiration. In the event that expired certificates are not replaced with new or renewed certificates that cover the contractual period, the City shall:

- A. Suspend the Agreement until such time as the new or renewed certificates are received by the City.
- B. The City may, at its sole discretion, terminate the Agreement for cause and seek damages from the Contractor in conjunction with the violation of the terms and conditions of the Agreement.

#### **ARTICLE 11- WARRANTY AND GUARANTEE, TESTS AND INSPECTIONS, CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK**

- 11.1 Warranty: The Contractor warrants and guarantees to the City that all Work will be in accordance with the Contract Documents and will not be defective. Prompt notice of all defects shall be given to the Contractor. All defective work, whether or not in place, may be rejected, corrected or accepted as provided in this Article.

- 11.1.1 Warranty of Title: The Contractor warrants to the City that it possesses good, clear and marketable title to all equipment and materials provided and that there

are no pending liens, claims or encumbrances against the equipment and materials.

11.1.2 Warranty of Specifications: The Contractor warrants that all equipment, materials and workmanship furnished, whether furnished by the Contractor, its subcontractors or suppliers, will comply with the specifications, drawings and other descriptions supplied or adopted and that all services will be performed in a workmanlike manner.

11.1.3 Warranty of Merchantability: The Contractor warrants that any and all equipment to be supplied pursuant to this Agreement is merchantable, free from defects, whether patent or latent in material or workmanship, and fit for the ordinary purposes for which it is intended.

11.2 Tests and Inspections: Contractor shall retain the services of an independent, certified, testing lab to perform all testing as required by the specifications, Contract drawings, and any applicable permitting agency. Contractor shall provide evidence of certification to the City before the work and testing is done. Testing results shall be submitted to the Engineer for review and approval at the time the results are provided to the Contractor. The Contractor shall give the Project Manager and City Inspector a minimum of twenty-four (24) hours' advanced notice of readiness of the Work for all required inspections, tests, or approvals and shall notify all applicable permitting agencies in a timely manner based on requirements set forth in the permit documents.

11.2.1 Neither observations by the Project Manager nor inspections, tests or approvals by others shall relieve the Contractor from its obligations to perform the Work in accordance with the Contract Documents.

11.3 Uncovering Work: If any work that is to be inspected, tested or approved is covered without approval or consent of the Project Manager, it must, if requested by the Project Manager, be uncovered for observation and/or testing. Such uncovering and replacement shall be at the Contractor's sole expense unless the Contractor has given the Project Manager timely notice of the Contractor's intention to cover such Work and the Project Manager has not acted with reasonable promptness in response to such notice.

11.3.1 If the Project Manager considers it necessary or advisable that Work covered in accordance with Paragraph 11.2.1, 11.2.2 and 11.2.3 be observed by the City or inspected or tested by others, the Contractor at the City's request, shall uncover, expose or otherwise make available for observation, inspection or testing as the Project Manager may require, that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is defective, the Contractor shall bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, including compensation for additional professional services, and an appropriate deductive Change Order shall be issued. If, however, such work is not found to be defective, the Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection testing and reconstruction if he makes a claim therefore as provided in Articles 14 and 15.

- 11.4 City May Stop the Work: If the Work is defective, or the Contractor fails to supply sufficient skilled supervisory personnel or workmen or suitable materials or equipment or the work area is deemed unsafe, the City may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of the City to stop the Work shall not give rise to any duty on the part of the City to exercise this right for the benefit of the Contractor or any other party. The City will not award any increase in Contract Price or Contract Time if the Work is stopped due to the circumstances described herein.
- 11.5 Correction or Removal of Defective Work Before Final Payment: If required by the Project Manager, the Contractor shall promptly, without cost to the City and as Specified by the Project Manager, either correct any defective Work, whether or not fabricated, installed or completed, or if the Work has been rejected by the City remove it from the site and replace it with non-defective Work.
- 11.6 One Year Correction Period After Final Payment: If within one (1) year after the date of final acceptance, or such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, any work is found to be defective, the Contractor shall promptly, without cost to the City and in accordance with the City's written instructions, either correct such defective Work, or, if it has been rejected by the City, remove it from the site and replace it with non-defective Work.
- If The Contractor does not promptly comply with the terms of such instructions or in an emergency where delay would cause serious risk of loss or damage, the City may have the defective Work corrected or the rejected Work removed and replaced, and all direct and indirect costs for such removal and replacement, including compensation for additional professional services, shall be paid by the Contractor.
- 11.7 Acceptance of Defective Work, Deductions: If, instead of requiring correction or removal and replacement of defective Work, the City, at the city's sole option, prefers to accept it, the City may do so. In such a case, if acceptance occurs prior to the Project Manager's recommendation of final payments, a Change Order shall be issued incorporating the necessary revisions in the Contracts Documents, including appropriate reduction in the Contract Price; or if the acceptance occurs after such recommendation, an appropriate amount shall be paid by the Contractor to the City.
- 11.8 City May Correct Defective Work: If the Contractor fails within a reasonable time after written notice of the Project Manager to proceed to correct defective Work or to remove and replace rejected Work as required by the Project Manager in accordance with Paragraph 11.5, or if the Contractor fails to perform the Work in accordance with the Contract Documents, the City may, after seven (7) days written notice to the Contractor, correct and remedy any such deficiency. In exercising its rights under this paragraph, the City shall proceed expeditiously. To the extent necessary to complete corrective and remedial action, the City may exclude the Contractor from all or part of the site, take possession of all or part of the Work, suspend the Contractor's services related thereto and take possession of the Contractor's tools, construction equipment and materials stored at the site or elsewhere. The Contractor shall allow the City's representative agents and employees such access to the site as may be necessary to enable the City to exercise its rights under this paragraph. All direct and indirect costs of the City in exercising such rights shall be charged against the Contractor in an

amount verified by the Project Manager, and a Change Order shall be issued incorporating the necessary revisions in the Contract Documents and a reduction in the Contract Price. Such direct and indirect costs shall include, in particular but without limitation, compensation for additional professional services required and costs of repair and replacement of work of others destroyed or damaged by correction, removal or replacement of the Contractor's defective Work. The Contractor shall not be allowed an extension of the Contract Time because of any delay in performance of the Work attributable to the exercise by the City of the City's right hereunder.

## ARTICLE 12 – INDEMNIFICATION

- 12.1 Disclaimer of Liability: The City shall not at any time, be liable for injury or damage occurring to any person or property from any cause, whatsoever, arising out of Contractor's construction and fulfillment of this agreement.
- 12.2 Indemnification: For other, additional good valuable consideration, the receipt and sufficiency of which is hereby acknowledged:
- 12.2.1 Contractor shall, at its sole cost and expense, indemnify and hold harmless the City, its representatives, employees and elected and appointed officials from or on account of all claims, damages, losses, liabilities and expenses, direct, indirect or consequential including but not limited to fees and charges of engineers, architects, attorneys, consultants and other professionals and court costs arising out of or in consequence of the performance of this Agreement at all trial and appellate levels. Indemnification shall specifically include but not be limited to claims, damages, losses, liabilities and expenses arising out of or from (a) the negligent or defective design of the project and Work of this Agreement; (b) any act, omission or default of the Contractor, its Subcontractors, agents, servants or employees; (c) any and all bodily injuries, sickness, disease or death; (d) injury to or destruction of tangible property, including any resulting loss of use; (e) other such damages, liabilities, or losses received or sustained by any person or persons during or on account of any operations connected with the construction of this Project including the warranty period; (f) the use of any improper materials; (g) any construction defect including both patent and latent defects; (h) failure to timely complete the work; (i) the violation of any federal, state, county or city laws, ordinances or regulations by Contractor, its subcontractors, agents, servants, independent contractors or employees; (j) the breach or alleged breach by Contractor of any term of the Agreement, including the breach or alleged breach of any warranty or guarantee.
- 12.2.2 Contractor agrees to indemnify, defend, save and hold harmless the City, its officers, agents and employees, from all damages, liabilities, losses, claims, fines and fees, and from any and all suits and actions of every name and description that may be brought against City, its officers, agents and employees, on account of any claims, fees, royalties, or costs for any invention or patent and/or for the infringement of any and all copyrights or patent rights claimed by any person, firm, or corporation.



12.2.3 Contractor shall pay all claims, losses, liens, settlements or judgments of any nature in connection with the foregoing indemnifications including, but not limited to, reasonable attorney's fees and costs for trials and appeals.

12.2.4 If any Subcontractor, supplier, laborer, or materialmen of Contractor or any other person directly or indirectly acting for or through Contractor files or attempts to file a mechanic's or construction lien against the real property on which the work is performed or any part or against any personal property or improvements thereon or make a claim against any monies due or to become due from the City to Contractor or from Contractor to a Subcontractor, for or on account of any work, labor, services, material, equipment, or other items furnished in connection with the Work or any change order, Contractor agrees to satisfy, remove, or discharge such lien or claim at its own expense by bond, payment, or otherwise within five (5) days of the filing or from receipt of written notice from the City.

Additionally, until such time as such lien or claim is satisfied, removed or discharged by Contractor, all monies due to Contractor, or that become due to Contractor before the lien or claim is satisfied, removed or otherwise discharged, shall be held by City as security for the satisfaction, removal and discharge of such lien and any expense that may be incurred while obtaining the discharge. If Contractor shall fail to do so, City shall have the right, in addition to all other rights and remedies provided by this Agreement or by law, to satisfy, remove, or discharge such lien or claim by whatever means City chooses at the entire and sole cost and expense of Contractor which costs and expenses shall, without limitation, include attorney's fees, litigation costs, fees and expenses and all court costs and assessments, and which shall be deducted from any amount owing to Contractor. In the event the amount due Contractor is less than the amount required to satisfy Contractor's obligation under this, or any other article, paragraph or section of this Agreement, the Contractor shall be liable for the deficiency due the City.

12.2.5 The Contractor and the City agree that Section 725.06(2), Florida Statutes controls the extent and limits of the indemnification and hold harmless provisions of this Agreement, if any, and that the parties waive any defects in the wording of this Article that runs afoul of said statutory section.

### **ARTICLE 13 – CHANGES IN THE WORK**

13.1 Without invalidating this Agreement, the City may, at any time or from time to time order additions, deletions or revisions in the Work through the issuance of Change Orders. Upon receipt of a Change Order, the Contractor shall proceed with the Work involved. All Work shall be executed under the applicable conditions of the Contract Documents. If any Change Order causes an increase or decrease in the Contract Price or an extension or shortening of the Contract Time, an equitable adjustment will be made as provided in Article 14 or Article 15 on the basis of a claim made by either Party.

13.2 The Project Manager may authorize minor changes in the work not involving an adjustment in the Contract Price or the Contract Time, which are consistent with the

overall intent of the Contract Documents. Such changes must be in writing and signed by the City and the Contractor.

- 13.3 If notice of any change affecting the general scope of the Work or change in the Contract Price is required by the provisions of any Bond to be given to the Surety, it will be the Contractor's responsibility to so notify the Surety, and the amount of each applicable Bond shall be adjusted accordingly. The Contractor shall furnish proof of such adjustment to the City.

#### **ARTICLE 14 – CHANGE OF CONTRACT PRICE**

Change of Contract Price, approved by City, shall be computed as follows:

- 14.1 Cost of the Work: The term "Cost of the Work" means the sum of all direct costs necessarily incurred and paid by Contractor in the proper performance of the Work. Except as otherwise may be agreed to in writing by the City, these costs shall be in amounts no higher than those prevailing in the City and shall include only the following items and shall not include any of the costs itemized in Paragraph 14.3:

14.1.1 Payroll costs for employees in the direct employ of the Contractor in the performance of the Work under schedules of job classifications agreed upon by the City and the Contractor. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus and cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, worker's compensation, health and retirement benefits, bonuses, sick leave, vacation and applicable holiday pay.

14.1.2 Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage, and required suppliers and field services. All cash discounts, rebates and refunds and all returns from sale of surplus materials and equipment shall accrue to the City, and the Contractor shall make provisions so that they may be obtained.

14.1.3 Supplemental costs including the following:

14.1.3.1 Cost, including transportation and maintenance of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workers, which are consumed in the performance of the Work.

14.1.3.2 Rentals of all construction equipment and machinery and the parts whether rented from the Contractor or others in accordance with rental agreements approved by the City, and the costs of transporting, loading, unloading, installation, dismantling and removal. The rental of any such equipment, machinery or parts shall cease when the use is no longer necessary for the Work.

14.1.3.3 Sales, consumer, use or similar taxes related to the Work and for which the Contractor is liable, imposed by laws and regulations.

- 14.1.3.4 Royalty payments and fees for permits and licenses.
- 14.1.3.5 The cost of utilities, fuel and sanitary facilities at the Work site.
- 14.1.3.6 Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, expressage and similar petty cash items in connection with the Work.
- 14.1.3.7 Cost of premiums for additional bonds and insurance required because of changes in the Work.

14.2 The Contract Price may only be increased by a Change Order when Work is modified in accordance with Article 13 and approved by the City in writing. Any claim for an increase in the Contract Price resulting from a Change Order shall be based on written notice delivered to the Project Manager within ten (10) days of the occurrence of the Change Order giving rise to the claim. Notice of the amount of the claim with supporting data shall be included in the Change Order and delivered within twenty (20) days of such occurrence unless Project Manager allows an additional period of time to ascertain accurate cost data. Any change in the Contract Price resulting from any such claim shall be incorporated in the Change Order. **IT IS EXPRESSLY AND SPECIFICALLY AGREED THAT ANY AND ALL CLAIMS FOR CHANGES TO THE CONTRACT PRICE SHALL BE WAIVED IF NOT SUBMITTED IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THIS SECTION.**

14.3 Not Included in the Cost of the Work: The term "cost of the Work" shall not include any of the following:

14.3.1 Payroll costs and other compensation of the Contractor's officers executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditor, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by the Contractor whether at the site or in the Contractor's principal or branch office for general administration of the work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 14.1.1, all of which are to be considered administrative costs covered by the Contractor's fee.

14.3.2 Expenses of the Contractor's principal and branch offices other than the Contractor's office at the site.

14.3.3 Any part of the Contractor's capital expenses, including interest on the Contractor's capital employed for the Work and charges against the Contractor for delinquent payments.

14.3.4 Cost of premiums for all bonds and for all insurance whether or not the Contractor is required by the Contract Documents to purchase and maintain the same.

14.3.5 Costs due to the negligence of the Contractor, any subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work,

disposal of materials or equipment wrongly supplied and making good any damage to property.

14.3.6 Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraph 14.1

14.4 Basis of Compensation: The Contractor's compensation, allowed to the Contractor for overhead and profit, shall be determined as follows:

14.4.1 A mutually acceptable negotiated fee:

14.4.1.1 For costs incurred under Paragraphs 14.1.1 and 14.1.2, the Contractor's fee shall not exceed five percent (5%).

14.4.1.2 No fee shall be payable on the basis of costs itemized under Paragraphs 14.1.3.1, 14.1.3.2, 14.1.3.3, 14.1.3.4, 14.1.3.5, 14.1.3.6, 14.1.3.7, 14.3.1, 14.3.2, 14.3.3, 14.3.4, 14.3.5 and 14.3.6.

14.4.1.3 The amount of credit to be allowed by the Contractor to the City for any such change which results in a net decrease plus a deduction in the Contractor's fee by an amount equal to five percent (5%) for the net decrease.

14.4.1.4 When both additions and credits are involved in any one change the combined overhead and profit shall be figured on the basis of net increase if any, however, not to exceed five percent (5%) of the agreed compensation. Profit will not be paid on any Work not performed.

14.5 Cost Breakdown Required: Whenever the cost of any Work is to be determined pursuant to this Article, the Contractor will submit in form acceptable to the City an itemized cost breakdown together with supporting documentation. Whenever a change in the Work is to be based upon mutual acceptance of a lump sum, whether the amount is an addition, credit, or no-charge-in-cost, the Contractor shall submit an estimate substantiated by a complete itemized breakdown:

14.5.1 The breakdown shall list quantities and unit prices for materials, labor, equipment and other items of cost.

14.5.2 Whenever a change involves the Contractor and one (1) or more subcontractors and the change is an increase in the agreed compensation, the overhead and profit percentage for the Contractor and each subcontractor shall be itemized separately.

14.6 Time for the City to Approve Extra Work: Any Extra Work in an amount up to and not exceeding a cumulative amount of \$25,000 for a specific project can be approved by the City Manager and shall require a written Change Order proposal to be submitted to the Public Works Director for submittal and approval by the City Manager. Extra Work exceeding the cumulative amount of \$25,000 for a specific project must be approved by the City Commission and a written Change Order proposal must be submitted to the Public Works Director for submittal and approval by the City Manager and City

Commission. No financial or time claim for delay to the project resulting from the Change Order approval process outlined above under Section 14.6 will be allowed.

## ARTICLE 15 – CHANGE OF THE CONTRACT TIME

- 15.1 The Contract Time may only be changed by a Change Order. Any claim for an extension in the Contract Time shall be based on written notice delivered to the Project Manager within five (5) days of the occurrence of the event giving rise to the claim. Any change in the Contract Time resulting from any such claim shall be incorporated in a Change Order.
- 15.2 The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of the Contractor if a claim is made there for as provided in Paragraph 15.1. Such delays shall include but not be limited to, acts or neglect by the City, or to fires, floods, labor disputes, epidemics, abnormal weather conditions, or acts of God.
- 15.3 All time limits stated in the Contract Documents are of the essence. The provisions of this Article 15 shall not exclude recovery for damages for delay by the Contractor.
- 15.4 Delays caused by or resulting from entities, contractors or subcontractors who are not affiliated with the CONTRACTOR (non-affiliated Contractors) shall not give rise to a claim by the CONTRACTOR for damages for increases in material and/or labor costs. Such entities, contractors and subcontractors include, but are not limited to, the City's contractors and subcontractors, Florida Power and Light Company, AT&T and Florida East Coast Railway, LLC.
- 15.5 Rights of Various Interests: Whenever work being done by City's forces or by other contractors is contiguous to or within the limits of work covered by this Contract, the respective rights of the various interests involved shall be established by the Project Manager to secure the completion of the various portions of the work in general harmony.

## ARTICLE 16 – LIQUIDATED DAMAGES

- 16.1 Upon failure of the Contractor to complete the Work within the time specified for completion, the Contractor shall pay to the City the sum of **Two Hundred and Fifty Dollars (\$250.00)** for each and every calendar day that the completion of the Work is delayed beyond the time specified in this Agreement for completion, as fixed and agreed liquidated damages and not as a penalty, so long as the delay is caused by the Contractor. Should an act of God or the acts or omissions of the City, its agents or representatives, in derogation to the terms of this Agreement cause the delay, the Contractor shall not be responsible for the delay nor liquidated damages. Liquidated damages are fixed and agreed upon between the Parties, recognizing the impossibility of precisely ascertaining the amount of damages that will be sustained by the City as a consequence of such delay and both parties desiring to obviate any question of dispute concerning the amount of damages and the cost and effect of the failure of the Contractor to complete the Work on time. Liquidated damages shall apply separately to each portion of the Work for which a time of completion is given. The City shall have the right to deduct from or retain any compensation which may be due or which may become due and payable to the Contractor the amount of liquidated damages,

and if the amount retained by the City is insufficient to pay in full such liquidated damages, the Contractor shall pay all liquidated damages in full. The Contractor shall be responsible for reimbursing the City, in addition to liquidated damages or other damages for delay, for all costs of engineering, architectural fees, and inspection and other costs incurred in administering the construction of the Project beyond the completion date specified or beyond an approved extension of time granted to the Contractor whichever is later. Delays caused by or resulting from entities, contractors or subcontractors who are not affiliated with the Contractor shall not give rise to a claim by Contractor for damages for increase in material and/or labor costs. Such entities, contractors and subcontractors include, but are not limited to, the City's contractors and subcontractors, Florida Power and Light Company, AT&T, and Florida East Coast Railway, LLC.

- 16.2 No Extended Damages: For other and additional good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the Contractor covenants and agrees that in the event of any delay of construction or for any reason, allegation or claim, and notwithstanding the reason of the delay, reason, claim or allegation or who caused them or the construction delay or whether they were caused by the City, that there will be no entitlement to Contractor to or for any direct or indirect financial damages or losses for extended corporate overhead impact, extended project overhead impacts, project support services, mobilization or demobilization or by whatever other label or legal concept or theory and types of names or labels or basis such claims may have, or any business damages or losses of whatever type or nature, and Contractor hereby waives any right to make any such claim or claims. This provision will have application and effect when construction delays are anticipated and agreed upon by both the City and the Contractor.

## **ARTICLE 17 – SUSPENSION OF WORK AND TERMINATION**

- 17.1 City May Suspend Work: The City may, at any time and without cause, suspend the Work or any portion of the Work for a period of not more than ninety (90) days by notice in writing to the Contractor which shall fix the date on which Work shall be resumed. The Contractor shall resume the Work on the date fixed. The Contractor will be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension, if the Contractor makes a claim as provided in Articles 14 and 15.
- 17.2 City's Right to Terminate Contract: The City may terminate this Agreement upon fifteen (15) calendar days' written notice upon the occurrence of any one or more of the following events:
- 17.2.1 If the Contractor commences a voluntary case or a petition is filed against the Contractor, under any chapter of the Bankruptcy Code, or if the Contractor takes any equivalent or similar action by filing a petition or otherwise under any other federal or state law in effect at such time relating to the bankruptcy or insolvency.
- 17.2.2 If the Contractor makes a general assignment for the benefit of creditors.

17.2.3 If a trustee, receiver, custodian or agent of the Contractor is appointed under applicable law or under Contract, whose appointment or authority to take charge of property of the Contractor is for the purpose of enforcing a lien against such property or for the purpose of general administration of such property for the benefit of the Contractor's creditors.

17.2.4 If Contractor fails to begin the Work within fifteen (15) calendar days after the Project Initiation Date, or fails to perform the Work with sufficient workers and equipment or with sufficient materials to ensure the prompt completion of the Work, or shall perform the Work unsuitably, or cause it to be rejected as defective and unsuitable, or shall discontinue the prosecution of the Work pursuant to the accepted schedule or if Contractor shall fail to perform any material term set forth in the Contract Documents, or from any other cause whatsoever shall not carry on the Work in an acceptable manner, Project Manager may give notice in writing to Contractor and its Surety of such delay, neglect or default, specifying the same.

17.2.5 If the Contractor repeatedly fails to make prompt payments to subcontractors or for labor, material or equipment.

17.2.6 If the Contractor repeatedly disregards proper safety procedures.

17.2.7 If the Contractor disregards any local, state or federal laws or regulations.

17.2.8 If the Contractor otherwise violates any provisions of this Agreement.

17.3 If Contractor, within a period of ten (10) calendar days after such notice, shall not proceed in accordance therewith, the City may exclude the Contractor from the Work site and take the prosecution of the Work out of the hands of the Contractor, and take possession of the Work and all of the Contractor's tools, appliances, construction equipment and machinery at the site and use them without liability to the City for trespass or conversion, incorporate in the Work all materials and equipment stored at the site or for which the City has paid the Contractor but which are stored elsewhere, and finish the Work as the City may deem expedient. In this instance, the Contractor shall not be entitled to receive any further compensation until the Work is finished.

17.3.1 If after notice of termination of Contractor's right to proceed, it is determined for any reason that Contractor was not in default, the rights and obligations of City and Contractor shall be the same as if the notice of termination had been issued pursuant to the Termination for Convenience clause as set forth in Section 17.5 below.

17.3.2 Upon receipt of Notice of Termination pursuant to Sections 17.2 or 17.5, Contractor shall promptly discontinue all affected work unless the Notice of Termination directs otherwise and deliver or otherwise make available to City all data, drawings, specifications, reports, estimates, summaries and such other information as may have been required by the Contract Documents whether completed or in process.

- 17.4 If the Contractor commits a default due to its insolvency or bankruptcy, the following shall apply:
- 17.4.1 Should this Agreement be entered into and fully executed by the parties, funds released and the Contractor (Debtor) files for bankruptcy, the following shall occur:
- 17.4.1.1 In the event the Contractor files a voluntary petition under 11 U.S.C. 301 or 302, or an order for relief is entered under 11 U.S.C. 303, the Contractor shall acknowledge the extent, validity, and priority of the lien recorded in favor of the City. The Contractor further agrees that in the event of this default, the City shall, at its option, be entitled to seek relief from the automatic stay pursuant to 11 U.S.C. 362. The City shall be entitled to relief from the automatic stay pursuant to 11 U.S.C. 362(d) (1) or (d) (2), and the Contractor agrees to waive the notice provisions in effect pursuant to 11 U.S.C. 362 and any applicable Local Rules of the United States Bankruptcy Court. The Contractor acknowledges that such waiver is done knowingly and voluntarily.
- 17.4.1.2 Alternatively, in the event the City does not seek stay relief, or if stay relief is denied, the City shall be entitled to monthly adequate protection payments within the meaning of 11 U.S.C. 361. The monthly adequate protection payments shall each be in an amount determined in accordance with the Note and Mortgage executed by the Contractor in favor of the City.
- 17.4.1.3 In the event the Contractor files for bankruptcy under Chapter 13 of Title 11, United States Code in addition to the foregoing provisions, the Contractor agrees to cure any amounts in arrears over a period not to exceed twenty-four (24) months from the date of the confirmation order, and such payments shall be made in addition to the regular monthly payments required by the Note and mortgage. Additionally, the Contractor shall agree that the City is over secured and, therefore, entitled to interest and attorney's fees pursuant to 11 U.S.C. 506(b). Such fees shall be allowed and payable as an administrative expense. Further, in the event the Contractor has less than five (5) years of payments remaining on the Note, the Contractor agrees that the treatment afforded to the claim of the City under any confirmed plan of reorganization shall provide that the remaining payments shall be satisfied in accordance with the Note, and that the remaining payments or claim shall not be extended or amortized over a longer period than the time remaining under the Note.
- 17.4.2 Should this Agreement be entered into and fully executed by the parties, and the funds have not been forwarded to Contractor, the following shall occur:
- 17.4.2.1 In the event the Contractor files a voluntary petition pursuant to 11 U.S.C. 301 or 302, or an order for relief is entered under 11 U.S.C. 303., the Contractor acknowledges that the commencement of a bankruptcy proceeding constitutes an event of default under the terms of this Agreement. Further, the Contractor acknowledges that this



Agreement constitutes an executory contract within the meaning of 11 U.S.C. 365. The Contractor acknowledges that this Agreement is not capable of being assumed pursuant to 11 U.S.C. 365(c)(2), unless the City expressly consents in writing to the assumption. In the event the City consents to the assumption, the Contractor agrees to file a motion to assume this Agreement within ten (10) days after receipt of written consent from the City, regardless of whether the bankruptcy proceeding is pending under Chapter 7, 11, or 13 of Title 11 of the United States Code. The Contractor further acknowledges that this Agreement is not capable of being assigned pursuant to 11 U.S.C. 365(b)(1).

- 17.5 Termination for Convenience: This Contract may be terminated for convenience in writing by City upon thirty (30) days written notice to Contractor (delivered by certified mail, return receipt requested) of intent to terminate and the date on which such termination becomes effective. In such case, Contractor shall be paid for all work executed and expenses incurred prior to termination in addition to termination settlement costs reasonably incurred by Contractor relating to commitments which had become firm prior to the termination. Payment shall include reasonable profit for work/services satisfactorily performed. No payment shall be made for profit for work/services which have not been performed.
- 17.6 Where the Contractor's service have been so terminated by the City, the termination shall not affect any rights of the City against the Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due the Contractor by the City will not release the Contractor from liability.
- 17.7 The Contractor has no right, authority or ability to terminate the Work except for the wrongful withholding of any payments due the Contractor from the City.

## ARTICLE 18 – DISPUTE RESOLUTION

- 18.1 Resolution of Disputes: Questions, claims, difficulties and disputes of whatever nature which may arise relative to the technical interpretation of the Contract Documents and fulfillment of this Agreement as to the character, quality, amount and value of any work done and materials furnished, or proposed to be done or furnished under or, by reason of, the Contract Documents which cannot be resolved by mutual agreement of Contract Administrator and Contractor shall be submitted to the Consultant for resolution. When either party has determined that a disputed question, claim, difficulty or dispute is at an impasse, that party shall notify the other party in writing and submit the question, claim, difficulty or dispute to the Consultant for resolution. The parties may agree to a proposed resolution at any time without the involvement and determination of the Consultant.
- 18.1.1 Consultant shall notify Contract Administrator and Contractor in writing of Consultant's decision within twenty-one (21) calendar days from the date of the submission of the question, claim, difficulty or dispute, unless Consultant requires time to gather information or allow the parties to provide additional information.

- 18.1.2 In the event the determination of a dispute by the Consultant under this Article is unacceptable to any of the parties hereto, the party objecting to the determination must notify the other party and the City Manager, in writing within ten (10) days after receipt of the determination. The notice must state the basis of the objection and the proposed resolution. Final resolution of such dispute shall be made by the City Manager. The City Manager's decision shall be final and binding on the parties.
- 18.1.3 All non-technical administrative disputes (such as billing and payment) shall be determined by Contract Administrator.
- 18.1.4 During the pendency of any dispute and after a determination thereof, Contractor, Consultant, and Contract Administrator shall act in good faith to mitigate any potential damages including utilization of construction schedule changes and alternate means of construction. During the pendency of any dispute arising under this Agreement, other than termination herein, Contractor shall carry on the Work and adhere to the progress schedule. The Work shall not be delayed or postponed pending resolution of any disputes or disagreements.
- 18.1.5 For any disputes which remain unsolved, within sixty (60) calendar days after Final Completion of the Work, the parties shall participate in mediation to address all unresolved disputes. A mediator shall be mutually agreed upon by the parties. Should any objection not be resolved in mediation, the parties retain all their legal rights and remedies under applicable law. If a party objecting to a determination, fails to comply in strict accordance with the requirements of this Article, said party specifically waives all of its rights provided hereunder, including its rights and remedies under applicable law.

#### **ARTICLE 19 – NOTICES**

- 19.1 All notices required by any of the Contract Documents shall be in writing and shall be deemed delivered upon mailing by certified mail, return receipt requested to the following:

To the City:

City Manager  
City of Fort Lauderdale  
100 North Andrews Avenue  
Fort Lauderdale, Florida 33301

with copy to the:

Project Manager and City Attorney  
City of Fort Lauderdale  
100 North Andrews Avenue  
Fort Lauderdale, Florida 33301

To the Contractor:

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## ARTICLE 20 – LIMITATION OF LIABILITY

- 20.1 The City desires to enter into this Agreement only if in so doing the City can place a limit on the City's liability for any cause of action arising out of this Agreement, so that the City's liability for any breach never exceeds the sum of \$1,000. For other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Contractor expresses its willingness to enter into this Agreement with the knowledge that the Contractor's recovery from the City to any action or claim arising from the Agreement is limited to a maximum amount of \$1,000, which amount shall be reduced by the amount actually paid by the City to the Contractor pursuant to this Agreement, for any action or claim arising out of this Agreement. Nothing contained in this paragraph or elsewhere in this Agreement is in any way intended either to be a waiver of the limitation placed upon the City's liability as set forth in Section 768.28, Florida Statutes, or to extend the City's liability beyond the limits established in said Section 768.28; and no claim or award against the City shall include attorney's fees, investigative costs, expert fees, suit costs or pre-judgment interest.
- 20.2 No Extended Damages: For other and additional good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the Contractor covenants and agrees that in the event of any delay of construction or for any reason, allegation or claim, and notwithstanding the reason of the delay, reason, claim or allegation or who caused them or the construction delay or whether they were caused by the City, that there will be no entitlement to Contractor to or for any direct or indirect financial damages or losses for extended corporate overhead impact, extended project overhead impacts, project support services, mobilization or demobilization or by whatever other label or legal concept or theory and types of names or labels or basis such claims may have, or any business damages or losses of whatever type or nature, and Contractor hereby waives any right to make any such claim or claims. This provision will have application and effect when construction delays are anticipated and agreed upon by both the City and the Contractor.

## ARTICLE 21 – GOVERNING LAW

- 21.1 This Agreement shall be governed by the laws of the State of Florida. Both Parties agree that the courts of the State of Florida shall have jurisdiction of any claim arising in connection with this Agreement. Venue for any claim, objection or dispute arising out of this Agreement shall be in Broward County, Florida. **By entering into this Contract, Contractor and City hereby expressly waive any rights either party may have to a trial by jury or any civil litigation related to, or arising out of the Project. Contractor shall specifically bind all subcontractors to the provisions of this Contract.**

## ARTICLE 22 – MISCELLANEOUS

- 22.1 The duties and obligations imposed by this Agreement and the rights and remedies available to the parties and, in particular but without limitation, the warranties, guaranties and obligations imposed upon the Contractor and all of the rights and remedies available to the City, are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by laws or regulations, by special warranty or guarantee or by other provisions of the Contract Documents, and the provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents, and the provisions of this Paragraph will survive final payment and termination or completion of this Agreement.
- 22.2 The Contractor shall not assign or transfer this Agreement or its rights, title or interests. The obligations undertaken by the Contractor pursuant to this Agreement shall not be delegated or assigned to any other person or firm. Violation of the terms of this Paragraph shall constitute a material breach of Agreement by the Contractor and the City any, at its discretion, cancel this Agreement and all rights, title and interest of the Contractor which shall immediately cease and terminate.
- 22.3 The Contractor and its employees, volunteers and agents shall be and remain an independent contractors and not agents or employees of the City with respect to all of the acts and services performed by and under the terms of this Agreement. This Agreement shall not in any way be constructed to create a partnership, association or any other kind of joint undertaking or venture between the Parties.
- 22.4 The City reserves the right to audit the records of the Contractor relating in any way to the Work to be performed pursuant to this Agreement at any time during the performance and term of this Agreement and for a period of three (3) years after completion and acceptance by the City. If required by the City, the Contractor agrees to submit to an audit by an independent certified public accountant selected by the City. The Contractor shall allow the City to inspect, examine and review the records of the Contractor at any and all times during normal business hours during the term of this Agreement.
- 22.5 The remedies expressly provided in this Agreement to the City shall not be deemed to be exclusive but shall be cumulative and in addition to all other remedies in favor of the City now or later existing at law or in equity.
- 22.6 Should any part, term or provisions of this Agreement be decided by the courts to be invalid, illegal or in conflict with any state or federal law, the validity of the remaining portion or provision shall not be affected.
- 22.7 Prohibition Against Contracting With Scrutinized Companies: Subject to *Odebrecht Construction, Inc., v. Prasad*, 876 F.Supp.2d 1305 (S.D. Fla. 2012), *affirmed*, *Odebrecht Construction, Inc., v. Secretary, Florida Department of Transportation*, 715 F.3d 1268 (11th Cir. 2013), with regard to the "Cuba Amendment," the Contractor certifies that it is not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List or the Scrutinized Companies that Boycott Israel List created pursuant to Section 215.4725, Florida Statutes (2016), that it is not engaged in a boycott of Israel, and that it does not

have business operations in Cuba or Syria, as provided in section 287.135, Florida Statutes (2016), as may be amended or revised. The City may terminate this Agreement at the City's option if the Contractor is found to have submitted a false certification as provided under subsection (5) of section 287.135, Florida Statutes (2016), as may be amended or revised, or been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List or the Scrutinized Companies that Boycott Israel List created pursuant to Section 215.4725, Florida Statutes (2016), or is engaged in a boycott of Israel or has been engaged in business operations in Cuba or Syria, as defined in Section 287.135, Florida Statutes (2016), as may be amended or revised.

- 22.8 Public Entity Crimes: In accordance with the Public Crimes Act, Section 287.133, Florida Statutes, a person or affiliate who is a contractor, consultant or other provider, who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to the City, may not submit a bid on a contract with the City for the construction or repair of a public building or public work, may not submit bids on leases of real property to the City, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with the City, and may not transact any business with the City in excess of the threshold amount provided in Section 287.017, Florida Statutes, for category two purchases for a period of thirty-six (36) months from the date of being placed on the convicted vendor list. Violation of this section by Contractor shall result in cancellation of the City purchase and may result in Contractor debarment.
- 22.9 Attorney Fees: If CITY or CONSULTANT incurs any expense in enforcing the terms of this Agreement through litigation, the prevailing party in that litigation shall be reimbursed for all such costs and expenses, including but not limited to court costs, and reasonable attorney fees incurred during litigation.

22.10 Public Records

**IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT [PRRCONTRACT@FORTLAUDERDALE.GOV](mailto:PRRCONTRACT@FORTLAUDERDALE.GOV), 954-828-5002, CITY CLERK'S OFFICE, 100 N. ANDREWS AVENUE, FORT LAUDERDALE, FLORIDA 33301.**

Contractor shall:

1. Keep and maintain public records that ordinarily and necessarily would be required by the City in order to perform the service.
2. Upon request from the City's custodian of public records, provide the City with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes (2016), as may be amended or revised, or as otherwise provided by law.

3. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of this contract if the Contractor does not transfer the records to the City.
4. Upon completion of the Contract, transfer, at no cost, to the City all public records in possession of the Contractor or keep and maintain public records required by the City to perform the service. If the Contractor transfers all public records to the City upon completion of this Contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Contractor keeps and maintains public records upon completion of this Contract, the Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City's custodian of public records, in a format that is compatible with the information technology systems of the City.

SAMPLE CONSTRUCTION AGREEMENT

Water Treatment Plant Concrete Restoration  
(Contractor)  
ProjectS 12170 & 12181

**CITY**

IN WITNESS OF THE FOREGOING, the parties have set their hands and seals the day and year first above written.

CITY OF FORT LAUDERDALE, a municipal  
corporation of the State of Florida

By: \_\_\_\_\_  
LEE R. FELDMAN, City Manager

(CORPORATE SEAL)

ATTEST:

By: \_\_\_\_\_  
JEFFREY A. MODARELLI  
City Clerk

Approved as to Legal Form:

By: \_\_\_\_\_  
RHONDA MONTOYA HASAN  
Assistant City Attorney

**CONTRACTOR**

WITNESSES:

CONTRACTOR.,  
a Florida corporation.

\_\_\_\_\_

By \_\_\_\_\_

\_\_\_\_\_  
Print Name\_\_\_\_\_  
PRINT NAME\_\_\_\_\_  
Title

ATTEST:

\_\_\_\_\_

BY: \_\_\_\_\_

\_\_\_\_\_  
Print Name\_\_\_\_\_  
PRINT NAME\_\_\_\_\_  
Secretary

(CORPORATE SEAL)

STATE OF FLORIDA:  
COUNTY OF BROWARD:

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 2017, by  
 \_\_\_\_\_ (Name), as \_\_\_\_\_ (Title) of \_\_\_\_\_ (CONTRACTOR), a  
 Florida corporation, on behalf of the Corporation.

SEAL

\_\_\_\_\_  
Notary Public, State of Florida\_\_\_\_\_  
Name of Notary Typed, Printed or Stamped☐ Personally Known or ☐ Produced Identification:

Type of Identification Produced: \_\_\_\_\_



## **GENERAL CONDITIONS**

**Unless otherwise modified in the projects special conditions, the following General Conditions shall be part of the Contract:**

**GC - 01 - DEFINITIONS** - The following words and expressions, or pronouns used in their stead, shall wherever they appear in the Contract and the Contract Documents, be construed as follows:

"Addendum" or "Addenda" - shall mean the additional Contract provisions issued in writing, by the Engineer, prior to the receipt of bids.

"Bid" – shall mean the offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

"Bidder" – shall mean any person, firm, company, corporation or entity submitting a Bid for the Work.

"Bonds" –shall mean Bid, performance and payment bonds and other instruments of security, furnished by Contractor and his surety in accordance with the Contract Documents.

"City" – shall mean the City of Fort Lauderdale, Florida, a Florida municipal corporation. In the event the City exercises its regulatory authority as a government body, the exercise of such regulatory authority and the enforcement of any rules, regulations, codes, laws and ordinances shall be deemed to have occurred pursuant to City's authority as a governmental body and shall not be attributable in any manner to the City as a party to this Contract. For the purpose of this Contract, "City" without modification shall mean the City Commission, and/or City Manager or his/her designee(s) as applicable.

"Construction Manager" - shall mean the Public Works Director or his/her designee.

"Construction Project Manager" - shall mean the Public Works Director or his/her designee.

"Consultant" – shall mean a person, firm, company, corporation or other entity employed by the City to perform the professional services for the project.

"Contract Work" - shall mean everything expressed or implied to be required to be furnished and furnished by the Contractor by any one or more of the parts of the Contract Documents referred to in the Contract hereof except Extra Work as hereinafter defined, it being understood that, in case of any inconsistency in or between any part or parts of this Contract, the Public Works Director shall determine which shall prevail.

"Design Documents" – shall mean the construction plans and specifications included as part of a Bid/Proposal Solicitation prepared either by the City or by the Consultant under a separate Agreement with the City.

"Engineer" - shall mean the Public Works Director or his/her designee.

"Extra Work" - shall mean work other than that required by the Contract.

"Inspector" – shall mean an authorized representative of the City assigned to make necessary inspections of materials furnished by Contractor and of the Work performed by Contractor.

"Notice" - shall mean written notice sent by certified United States Mail, return receipt requested, or sent by commercial express carrier with acknowledgement of delivery, or via fax or email, or by hand delivery with a request for a written receipt of acknowledgment of delivery and shall be served upon the Contractor either personally or to its place of business listed in the Bid.

"Owner" - shall mean the City of Fort Lauderdale.

"Project Manager" - shall mean the Public Works Director or his/her designee.

"Public Works Director" -shall mean the Public Works Director of the City of Fort Lauderdale, Florida or his/her designee(s).

"Site" - shall mean the area upon or in which the Contractor's operations are carried out and such other areas adjacent thereto as may be designated as such by the Public Works Director.

"Subcontractor" - shall mean any person, firm, company, corporation or other entity, other than employees of the Contractor, who or which contracts with the contractor, to furnish, or actually furnishes labor and materials, or labor and equipment, or labor, materials and equipment at the site.

"Surety" - shall mean any corporation or entity that executes, as Surety, the Contractor's performance and payment bond securing the performance of this Contract.

**GC - 02 - SITE INVESTIGATION AND REPRESENTATION** - The Contractor acknowledges that it has satisfied itself as to the nature and location of the Work under the Contract Documents, the general and local conditions of the Site, particularly those bearing upon availability of transportation, disposal, handling and storage of materials, availability of labor, water, electric power, and roads, the conformation and conditions at the ground based on City provided reports, the type of equipment and facilities needed preliminary to and during the prosecution of the Work and all other matters which can in any way affect the Work or the cost thereof under the Contract Documents.

The Contractor acknowledges that it has conducted extensive tests, examinations and investigations and represents and warrants a thorough familiarization with the nature and extent of the Contract Documents, the Work, locality, soil conditions, moisture conditions and all year-round local weather and climate conditions (past and present), and, in reliance on such tests, examination and investigations conducted by Contractor and the Contractor's experts, has determined that no conditions exist that would in any manner affect the Bid Price and that the project can be completed for the Bid Price submitted.

The Contractor, on its own, has made or caused to be made examinations, investigations, tests and studies of reports and related data in addition to those referred above, as Contractor deemed necessary to perform the Work at the Bid price set by the Contractor, within the contract time and in accordance with the other terms and conditions of the Contract Documents and the Bid made by the Contractor; and no additional examinations, investigations, tests, reports or similar data are, or will be, required by Contractor to assure that the Work can be done at the Bid price set by the Contractor.

The Contractor further acknowledges that it has satisfied itself based on any geotechnical reports the City may provide and inspection of the project Site as to the character, quality, and quantity of surface and subsurface materials to be encountered from inspecting the site and from evaluating information derived from exploratory work that may have been done by the City or included in the

Contract Documents and finds and has further determined that no conditions exist that would in any manner affect the Bid price and that the project can be completed for the Bid price submitted.

Any failure by the Contractor to acquaint itself with all the provided information and information obtained by visiting the project Site will not relieve Contractor from responsibility for properly estimating the difficulty or cost thereof under the Contract Documents. In the event that the actual subsurface conditions vary from the actual City provided reports, the Contractor shall notify the City and the Contract amount may be adjusted depending on the conditions, at the approval of the City.

**GC - 03 - SUBSTITUTIONS** - If the Contractor desires to use materials and/or products of manufacturer's names different from those specified in the Contract Documents, the Bidder requesting the substitution shall make written application as described herein. The burden of proving the equality of the proposed substitution rests on the Bidder making the request. To be acceptable, the proposed substitution shall meet or exceed all expressed requirements of the Contract Documents and shall be submitted upon the Contractor's letterhead, in addition to the "Contractor's Request for Substitution" form provided by the Public Works Director. The following requirements shall be met in order for the substitution to be considered:

1. Requests for substitution shall reach the Public Works Director no less than ten (10) Working Days prior to the date set for opening of Bids; and
2. Requests for substitution shall be accompanied by such technical data, as the party making the request desires to submit. The Public Works Director will consider reports from reputable independent testing laboratories, verified experience records from previous users and other written information valid in the circumstances; and
3. Requests for substitution shall completely and clearly indicate in what respects the materials and/or products differ from those indicated in the Contract Documents; and
4. Requests for substitution shall be accompanied by the manufacturer's printed recommendations clearly describing the installation, use and care, as applicable, of the proposed substitutions; and
5. Requests for substitution shall be accompanied by a complete schedule of changes in the Contract Documents, if any, which must be made to permit the use of the proposed substitution.

If a proposed substitution is approved by the Public Works Director, an Addendum will be issued to prospective bidders not less than three (3) working days prior to the date set for opening of Bids. Unless substitutions are received and approved as described above, the successful Bidder shall be responsible for furnishing materials and products in strict accordance with the Contract Documents.

**GC - 04 - CONTROL OF THE WORK** - The Public Works Director shall have full control and direction of the Work in all respects. The Public Works Director and/or his authorized designee(s) shall, at all times, have the right to inspect the Work and materials. The Contractor shall furnish all reasonable facilities for obtaining such information, as the Public Works Director may desire respecting the quality of the Work and materials and the manner of conducting the Work. Should the Contractor be directed or permitted to perform night Work, or to vary the period which work is ordinarily carried on in the daytime, he shall give ample notice to the Public Works Director so that proper and adequate inspection may be provided. Such Work shall be done only under such regulations as are furnished in writing by the Public Works Director, and no extra compensation shall be allowed to the Contractor therefore. In the event of night work, the Contractor shall furnish

such light, satisfactory to the Public Works Director, as will insure proper inspection. Nothing herein contained shall relieve the Contractor from compliance with any and all City ordinances relating to noise or Work during prohibited hours.

The Contractor shall keep the Public Works Director informed, a reasonable time in advance, as to his need for grades and lines in order that the same may be furnished and all necessary measurements made for records and for payment with the minimum of inconvenience to the Public Works Director or of delay to the Contractor. The Contractor shall submit to the Public Works Director or Inspector on the job a written request outlining the streets, etc., for which the Contractor desires lines and grades. It is the intention not to delay the Work for the giving of lines and grades, but when necessary, work operations shall be suspended for such reasonable time as the Public Works Director may require for this purpose. However, such cost increases shall be authorized either by the City Manager and/or designee, or the City Commission based upon the purchasing threshold amounts provided for in Chapter 2 of the City of Fort Lauderdale's Code of Ordinances.

**GC - 05 - SUBCONTRACTOR** - The Contractor shall not sublet, in whole or any part of the Work without the written consent and approval of the Public Works Director. Within ten (10) days after official notification of starting date, the Contractor must submit in writing, to the Public Works Director, a list of all Subcontractors. No Work shall be done by any Subcontractor until such Subcontractor has been officially approved by the Public Works Director. A subcontractor not appearing on the original list will not be approved without written request submitted to the Public Works Director and approved by the Public Works Director. In all cases, the Contractor shall give his personal attention to the Work of the Subcontractors and the Subcontractor is liable to be discharged by the Contractor, at the direction of the Public Works Director, for neglect of duty, incompetence or misconduct.

Acceptance of any Subcontractor, other person, or organization by the Public Works Director shall not constitute a waiver of any right of Public Works Director to reject defective Work or Work not in conformance with the Contract Documents.

Contractor shall be fully responsible for all acts and omissions of his Subcontractors and of persons and organizations directly or indirectly employed by them and of persons and organizations for whose acts any of them may be liable to the same extent that he is responsible for the acts and omissions of persons directly employed by him. Nothing in the Contract Documents shall create any contractual relationship between City and any Subcontractor or other person or organization having a direct contract with Contractor, nor shall it create any obligation on the part of City to pay or to see to the payment of any moneys due to any Subcontractor or other person, or organization, except as may otherwise be required by law.

**GC – 06 - QUANTITIES** - It is mutually agreed that the proposal shows the approximate amounts only along with the Plans and the general location. It is also mutually agreed that no change will be made involving any departure from the general scheme of the Work and that no such change involving a material change in cost, either to the City or Contractor, shall be made, except upon written permission of the City. However, the Public Works Director shall have the right to make minor alternations in the line, grade, plan, form or materials of the Work herein contemplated any time before the completion of the same. That if such alterations shall diminish the quantity of the Work to be done, such alterations shall not constitute a claim for damages or anticipated profits. That if such alterations increase the amount of the Work to be done, such increase shall be paid for according to the quantity actually performed and at the unit price or prices stipulated therefore in the Contract.

The City shall, in all cases of dispute, determine the amount or quantity of the several kinds of Work which are to be paid for under this Contract, and shall decide all questions relative to the execution of the same, and such estimates and decisions shall be final and binding.

Any Work not herein specified, which might be fairly implied as included in the Contract, of which the City shall judge, shall be done by the Contractor without extra charge. However, such cost increases shall be authorized either by the City Manager and/or designee, or the City Commission based upon the purchasing threshold amounts provided for in Chapter 2 of the City of Fort Lauderdale's Code of Ordinances.

**GC-07 - NO ORAL CHANGES** - Except to the extent expressly set forth in the Contract, no change in or modification, termination or discharge of the Contract in any form whatsoever, shall be valid or enforceable unless it is in writing and signed by the parties charged, therewith or their duly authorized representative.

**GC - 08 - PERMITS AND PROTECTION OF PUBLIC** – Permits on file with the City and or those permits to be obtained shall be considered directive in nature and will be considered a part of this Contract. A copy of all permits shall be given to the City and become part of the Contract Documents. Terms of permits shall be met prior to acceptance of the Work and release of the final payment.

The Contractor shall be required to observe all the ordinances in relation to obtaining permits for occupying, excavating, or in any way obstructing the streets and alleys. He shall erect and maintain barricades and sufficient safeguards around all excavations, embankments or obstructions; he shall place sufficient warning lights at or near the Work; keep the same burning from sunset to sunrise, employ watchmen, and strictly obey all laws and ordinances controlling or limiting those engaged in similar work.

Where there are telephones, light or power poles, water mains, conduits, pipes or drains or other construction, either public or private, in or on the streets or alleys, the Work shall be so conducted that no interruption or delay will be caused in the operation or use of the same. Proper written notice shall be given, and all the facilities, afforded the owners of such construction encountered or likely to be encountered, as will enable them to preserve the same from injury.

The Contractor shall not be permitted to interfere with public travel and convenience by grading or tearing up streets indiscriminately, but the Work of constructing the various items in this contract shall proceed in an orderly, systematic and progressive manner.

Contractor shall not load nor permit any part of any structure to be loaded with weights that will endanger the structure, nor shall he subject any part of the Work to stresses or pressures that will endanger it.

Where lifting operations involving the use of specialized cranes are required as part of construction, Contractor must make undertake the following investigation and submit the results and documentation to the Engineer prior to commencing any lifting operations: marking a very specific area in the field for the placement of the crane; a drawing showing the limitations of the job operation (i.e. not over adjacent properties or pedestrian and high vehicular traffic areas); underground utility exploration in the vicinity of the crane location, which may include ground penetrating radar to identify voids or old pipe or other subsurface features that could lead to sudden failure; assessment of the underlying soil and roadway materials and a worst case analysis based on entire load being distributed on just one or two outriggers; provision of properly sized pads under the outriggers; loading charts from manufacturer showing allowable configurations/loads; and inspection to make sure crane operation is in accordance with the permit conditions.

**GC - 09 - DISEASE REGULATIONS** - The Contractor shall enforce all sanitary regulations and take all precautions against infectious diseases as the Public Works Director may deem necessary. Should any infectious or contagious diseases occur among his employees, he shall arrange for the immediate removal of the employee from the Site and isolation of all persons connected with the Work.

**GC - 10 - CONTRACTOR TO CHECK PLANS, SPECIFICATIONS, AND DATA** - The Contractor shall verify all dimensions, quantities, and details shown on the plans, supplementary drawings, schedules, or other data received from the Public Works Director, and shall notify the Public Works Director of all errors, omissions, conflicts and discrepancies found therein within three (3) working days of discovery. Failure to discover or correct errors, conflicts, or discrepancies shall not relieve the Contractor of full responsibility for unsatisfactory Work, faulty construction, or improper operation resulting there from nor from rectifying such condition at his own expense.

**GC - 11 - SUPPLEMENTARY DRAWINGS** - When, in the opinion of the Public Works Director, it becomes necessary to explain more fully the Work to be done, or to illustrate the work further, or to show any changes which may be required, drawings, known as supplementary drawings, with specifications pertaining thereto, will be prepared by the Public Works Director and copies will be given to the Contractor.

The supplementary drawings shall be binding upon the Contractor with the same force as the original Plans. Where such supplementary drawings require either less or more than the estimated quantities of work, credit to the City or compensations therefore to the Contractor shall be subject to the terms of the Contract.

**GC - 12 - MATERIALS AND WORKMANSHIP** - All material and workmanship shall, in every respect, be in conformity with approved modern practice and with prevailing standards of performance and quality. In the event of dispute the Public Works Director's decision shall be final. Wherever the Plans, specifications, Contract Documents, or the directions of the Public Works Director are unclear as to what is permissible and/or fail to note the quality of any Work, that interpretation will be made by the Public Works Director, which is in accordance with approved modern practice, to meet the particular requirements of the Contract.

In all cases, new materials shall be used, unless this provision is waived by notice from the City in writing.

**GC - 13 - SAFEGUARDING MARKS** - The Contractor shall safeguard all points, stakes, grade marks, monuments, and bench marks made or established on the Work, bear the cost of re-establishing same if disturbed, or bear the entire expense of rectifying Work improperly installed due to not maintaining or protecting or for removing without authorization, such established points, stakes and marks. The Contractor shall safeguard all existing and known property corners, monuments and marks not related to the Work and, if required, shall bear the cost of having them re-established by a licensed surveyor if disturbed or destroyed during the course of construction.

**GC - 14 - EXISTING UTILITY SERVICE** - All existing utility service shall be maintained with a minimum of interruption at the expense of the Contractor.

**GC - 15 - JOB DESCRIPTION SIGNS** – Contractor, at Contractor's expense, shall furnish, erect, and maintain suitable weatherproof signs on jobs over \$100,000 containing the following information:

1. City Seal (in colors)
2. Project or Improvement Number
3. Job Description

4. Estimated Cost
5. Completion Date

Minimum size of sign shall be four feet high, eight feet wide and shall be suitably anchored. The entire sign shall be painted and present a pleasing appearance. Exact location of signs will be determined in the field. Two (2) signs will be required, one at each end of the job. All costs of this work shall be included in other parts of the work.

**GC - 16 - FLORIDA EAST COAST RIGHT-OF-WAY** - Whenever a City contractor is constructing within the Florida East Coast Railway Company's Right-of-Way, it will be mandatory that the contractor carry separate bodily injury and property damage insurance in the amounts as stated below. This insurance shall be taken out and maintained during the life of the Contract.

Bodily injury insurance in an amount not less than \$500,000.00 for injuries, including wrongful death to any one person, and subject to the same limit for each person, in an amount not less than \$1,000,000.00 on account of any one occurrence, and

Property damage insurance in an amount not less than \$500,000.00 for damages on account of any one occurrence and in an amount not less than \$1,000,000.00 for damages on account of all occurrences.

**GC - 17 - ACCIDENTS** - The Contractor shall provide such equipment and facilities as are necessary and/or required, in the case of accidents, for first aide services to be provided to a person who may be injured during the project duration. The Contractor shall also comply with the OSHA requirements as defined in the United States Labor Code 29 CFR 1926.50.

In addition, the Contractor must report immediately to the Public Works Director every accident to persons or damage to property, and shall furnish in writing full information, including testimony of witnesses regarding any and all accidents.

**GC - 18 - SAFETY PRECAUTIONS** - Contractor must adhere to the applicable environmental protection guidelines for the duration of a project. If hazardous waste materials are used, detected or generated at any time, the Project Manager must be immediately notified of each and every occurrence. The Contractor shall comply with all codes, ordinances, rules, orders and other legal requirements of public authorities (including OSHA, EPA, DERM, the City, Broward County, State of Florida, and Florida Building Code), which bear on the performance of the Work.

The Contractor shall take the responsibility to ensure that all Work is performed using adequate safeguards, including but not limited to: proper safe rigging, safety nets, fencing, scaffolding, barricades, chain link fencing, railings, barricades, steel plates, safety lights, and ladders that are necessary for the protection of its employees, as well as the public and City employees. All riggings and scaffolding shall be constructed with good sound materials, of adequate dimensions for their intended use, and substantially braced, tied or secured to ensure absolute safety for those required to use it, as well as those in the vicinity. All riggings, scaffolding, platforms, equipment guards, trenching, shoring, ladders and similar actions or equipment shall be OSHA approved, as applicable, and in accordance with all Federal, State and local regulations.

**GC - 19 - DUST PREVENTION** - The Contractor shall, by means of a water spray, or temporary asphalt pavement, take all necessary precautions to prevent or abate a dust nuisance arising from dry weather or Work in an incomplete stage. All costs of this Work shall be included in cost of other parts of the Work.

Should the Contractor fail to abate a dust nuisance by the above methods, and then he will be required to immediately construct temporary patches per City standards.

**GC - 20 - PLACING BARRICADES AND WARNING LIGHTS** - The Contractor shall furnish and place, at his own expense, all barricades, warning lights, automatic blinker lights and such devices necessary to properly protect the work and vehicular and pedestrian traffic. Should the Contractor fail to erect or maintain such barricades, warning lights, etc., the Public Works Director may, after 24 hours' notice to the Contractor, proceed to have such barricades and warning lights placed and maintained by City or other forces and all costs incurred thereof charged to the Contractor and may be retained by the City from any monies due, or to become due, to the Contractor.

**GC - 21 - TRAFFIC CONTROL** - The Contractor shall coordinate all Work and obtain, through the Engineering Department, any permits required to detour traffic or close any street before starting to work in the road. The following section: Part VI Traffic Controls for Street and Highway Construction and Maintenance Operations, MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, U.S. Department of Transportation Federal Highway Administration, 2009, or current edition, shall be used as a guide for requirement and placement of traffic control devices, signs and barricades. The Public Works Director shall determine requirements for the above. The above publication is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. In the event that a Maintenance of Traffic (MOT) Plan is required, the Plan shall be prepared by an A.A.S.T.A. certified technician.

All traffic control devices, flashing lights, signs and barricades shall be maintained in working condition at all times.

**GC - 22 - COORDINATION** - The Contractor shall notify all utilities, transportation department, etc., in writing, with a copy to the Public Works Director before construction is started and shall coordinate his Work with them. The Contractor shall cooperate with the owners of any underground or overhead utility lines in their removal, construction and rearrangement operations in order that services rendered by these parties will not be unnecessarily interrupted.

The Contractor shall arrange his Work and dispose of his materials so as to not interfere with the operation of other Contractors engaged upon adjacent work and to join his Work to that of others in a proper manner and to perform his Work in the proper sequence in relation to that of other Contractors all as may be directed by the Public Works Director.

Each Contractor shall be responsible for any damage done by him or his agents to the work performed by another Contractor.

The Contractor shall contact the Broward County Transportation Department and the Florida Department of Transportation, as applicable, to verify and obtain location of any and all traffic conduits, loops, and street light underground services.

**GC - 23 - WATER** - Bulk water used for construction, flushing pipelines, and testing shall be obtained from fire hydrants. Contractor shall make payment for hydrant meter at Treasury Billing



Office, 1st Floor, City Hall, 100 N. Andrews Avenue. With the paid receipt, contractor can pick up hydrant meter at the utility location office. No connection shall be made to a fire hydrant without a meter connected.

**GC - 24 - PROHIBITION AGAINST CONTRACTING WITH SCRUTINIZED COMPANIES** - Subject to *Odebrecht Construction, Inc., v. Prasad*, 876 F.Supp.2d 1305 (S.D. Fla. 2012), *affirmed*, *Odebrecht Construction, Inc., v. Secretary, Florida Department of Transportation*, 715 F.3d 1268 (11th Cir. 2013), with regard to the "Cuba Amendment," the Contractor certifies that it is not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List or the Scrutinized Companies that Boycott Israel List created pursuant to Section 215.4725, Florida Statutes (2016), that it is not engaged in a boycott of Israel, and that it does not have business operations in Cuba or Syria, as provided in section 287.135, Florida Statutes (2016), as may be amended or revised. The City may terminate this Agreement at the City's option if the Contractor is found to have submitted a false certification as provided under subsection (5) of section 287.135, Florida Statutes (2016), as may be amended or revised, or been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List or the Scrutinized Companies that Boycott Israel List created pursuant to Section 215.4725, Florida Statutes (2016), or is engaged in a boycott of Israel or has been engaged in business operations in Cuba or Syria, as defined in Section 287.135, Florida Statutes (2016), as may be amended or revised.

**GC - 25 - LOCATION OF UNDERGROUND FACILITIES** - If the Proposer, for the purpose of responding to this solicitation, requests the location of underground facilities through the Sunshine State One-Call of Florida, Inc. notification system or through any person or entity providing a facility locating service, and underground facilities are marked with paint, stakes or other markings within the City pursuant to such a request, then the Proposer shall be deemed non-responsive to this solicitation in accordance with Section 2-184(5) of the City of Fort Lauderdale Code of Ordinances.

**GC - 26 – USE OF FLORIDA LUMBER TIMBER AND OTHER FOREST PRODUCTS** - In accordance with Florida Statute 255.20 (3), The City specifies that lumber, timber, and other forest products used for this project shall be produced and manufactured in the state of Florida if such products are available and their price, fitness, and quality are equal. This requirement does not apply to plywood specified for monolithic concrete forms, if the structural or service requirements for timber for a particular job cannot be supplied by native species, or if the construction is financed in whole or in part from federal funds with the requirement that there be no restrictions as to species or place of manufacture.

The Bidder affirms by submitting a bid response to this solicitation that they will comply with section 255.20 (3) Florida Statutes.

**GC – 27 – PUBLIC RECORDS/TRADE SECRETS/COPYRIGHT:** The Proposer's response to the Solicitation is a public record pursuant to Florida law, which is subject to disclosure by the City under the State of Florida Public Records Law, Florida Statutes Chapter 119.07 ("Public Records Law"). The City shall permit public access to all documents, papers, letters or other material submitted in connection with this Solicitation and the Contract to be executed for this Solicitation, subject to the provisions of Chapter 119.07 of the Florida Statutes.

Any language contained in the Proposer's response to the Solicitation purporting to require confidentiality of any portion of the Proposer's response to the Solicitation, except to the extent that certain information is in the City's opinion a Trade Secret pursuant to Florida law, shall be

void. If a Proposer submits any documents or other information to the City which the Proposer claims is Trade Secret information and exempt from Florida Statutes Chapter 119.07 ("Public Records Laws"), the Proposer shall clearly designate that it is a Trade Secret and that it is asserting that the document or information is exempt. The Proposer must specifically identify the exemption being claimed under Florida Statutes 119.07. The City shall be the final arbiter of whether any information contained in the Proposer's response to the Solicitation constitutes a Trade Secret. The City's determination of whether an exemption applies shall be final, and the proposer agrees to defend, indemnify, and hold harmless the City and the City's officers, employees, and agent, against any loss or damages incurred by any person or entity as a result of the City's treatment of records as public records. Proposals purporting to be subject to copyright protection in full or in part will be rejected.

EXCEPT FOR CLEARLY MARKED PORTIONS THAT ARE BONA FIDE TRADE SECRETS PURSUANT TO FLORIDA LAW, DO NOT MARK YOUR RESPONSE TO THE SOLICITATION AS PROPRIETARY OR CONFIDENTIAL. DO NOT MARK YOUR RESPONSE TO THE SOLICITATION OR ANY PART THEREOF AS COPYRIGHTED.

**IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:**

**Telephone Number:** (954) 828-5002

**Mailing Address:** City Clerk's Office  
100 N. Andrews Avenue  
Fort Lauderdale, FL 33301

**E-mail:** [prcontract@fortlauderdale.gov](mailto:prcontract@fortlauderdale.gov)

Contractor shall:

1. Keep and maintain public records that ordinarily and necessarily would be required by the City in order to perform the service.
2. Upon request from the City's custodian of public records, provide the City with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes (2016), as may be amended or revised, or as otherwise provided by law.
3. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of this contract if the Contractor does not transfer the records to the City.
4. Upon completion of the Contract, transfer, at no cost, to the City all public records in possession of the Contractor or keep and maintain public records required by the City to perform the service. If the Contractor transfers all public records to the City upon

completion of this Contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Contractor keeps and maintains public records upon completion of this Contract, the Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City's custodian of public records, in a format that is compatible with the information technology systems of the City.

## TREATMENT PLANT CONCRETE REPAIR

## PROJECT 12170 &amp; 12181

**SECTION 01001  
GENERAL REQUIREMENTS****PART 1 PROJECT DESCRIPTION****1.1 GENERAL**

- A. A brief description of the Work is stated in the NOTICE TO CONTRACTORS. To determine the full scope of the Project or any particular part of the Project, coordinate the applicable information in these Contract Documents.
- B. The work under this Contract shall be performed by the CONTRACTOR as required by the CITY. Work will be authorized in the form of a Notice to Proceed issued to the CONTRACTOR. The CONTRACTOR shall complete all work in the Contract within the number of calendar days stipulated in the Contract unless an extension in the time of completion is granted by the CITY, as stated in the INSTRUCTIONS TO BIDDERS. Upon completion of the work and compliance with applicable provisions in the Contract Documents, the CONTRACTOR will receive final payment for all work done.
- C. The following additional information, though not all-inclusive, is given to assist contractors in their evaluation of the work required to meet the project objectives.
- D. The CONTRACTOR shall become familiar with the existing operating conditions of the CITY's water and wastewater facilities and take such into consideration in planning and scheduling work. No extra claims shall be made for work required to achieve conditions beyond those obtainable under normal operation of the facilities necessary to accomplish the work.

**PART 2 SEQUENCE OF OPERATIONS****2.1 SCHEDULING**

- A. General: Prepare and submit schedule in accordance with the provisions of Section 01310, PROGRESS SCHEDULES.
- B. Plan the Work and carry it out with minimum interference to the operation of the existing facilities. Prior to starting the work, confer with the CITY's representative to develop an approved work schedule which will permit the facilities to function normally as practical. It may be necessary to do certain parts of the construction work outside normal working hours in order to avoid undesirable conditions. The CONTRACTOR shall do this work at such times and at no additional cost to the CITY.
- C. No work shall be started until the CONTRACTOR has received approved shop drawings, established material/delivery dates for all equipment, and received approval of the construction schedule from the CITY. The CONTRACTOR shall have sufficient manpower, equipment, and material to complete the project.
- D. No work shall commence without express consent of the CITY.

## TREATMENT PLANT CONCRETE REPAIR

## PROJECT 12170 &amp; 12181

## 2.2 MOBILIZATION AND DEMOBILIZATION

- A. CONTRACTOR shall be responsible for mobilization and demobilization of labor, materials and equipment. No payment for mobilization and demobilization shall be included.

## 2.3 COORDINATION

- A. CONTRACTOR shall cooperate in the coordination of separate activities in a manner that will provide the least interference with the CITY's operations and other contractors and utility companies working in the area, and in the interfacing and connection of the separate elements of the overall project work.
- B. If any difficulty or dispute should arise in the accomplishment of the above, the problem shall be brought immediately to the attention of the CITY.

## 2.4 SHUTDOWN OF EXISTING OPERATIONS OR UTILITIES

- A. Continuous operation of the CITY's service functions is of critical importance. The CONTRACTOR's work shall not result in the interruption of sewage, water, or solid waste service to any customers.
- B. Minimizing conflicts with the ongoing area-wide commercial activities is of critical importance. The CONTRACTOR's work shall minimize the interruption of operations at any facility or business.
- C. Connections to existing services or utilities, or other work that requires the temporary shutdown of any existing operations or utilities shall be planned in detail with appropriate scheduling of the work and coordinated with the CITY. Two business days advanced notice shall be given in order that the CITY may witness the shutdown, tie-in, and startup. The temporary shutdown must be approved by the CITY. All tie-in and bypass operations shall be the responsibility of the CONTRACTOR and are considered incidental to the cost of construction and provided at no additional cost to the CITY.
- D. All materials and equipment (including emergency equipment) necessary to expedite the tie-in shall be on hand prior to the shutdown of existing services or utilities.

## 2.5 OPERATION OF EXISTING SYSTEM PROHIBITED

- A. At no time is the contractor to undertake to close off any utility lines or open valves or take any other action which would affect the operation of existing systems. The CITY's operations crew will operate all valves. Provide at least one business day notice to CITY prior to any operations.

## TREATMENT PLANT CONCRETE REPAIR

## PROJECT 12170 &amp; 12181

**PART 3 SITE CONDITIONS****3.1 SITE INVESTIGATION AND REPRESENTATION**

- A. The CONTRACTOR acknowledges satisfaction as to the general nature and location of the work, the general and local conditions, particularly those bearing upon availability of transportation, availability of labor, water, electric power, roads, and uncertainties of weather, tides, or similar physical conditions, the character of equipment and facilities needed preliminary to and during the execution of the work, and all other matters which can in any way affect the work or the cost thereof under this Contract.
- B. Failure by the CONTRACTOR to become acquainted with the physical conditions and all the available information will not relieve the CONTRACTOR from responsibility for properly estimating the difficulty or cost of successfully performing the work.
- C. The CONTRACTOR warrants that as a result of examination and investigation of all the aforesaid data, the CONTRACTOR can perform the work in a good and workmanlike manner and to the satisfaction of the CITY. The CITY assumes no responsibility for any representations made by any of its officers or agents during or prior to the execution of this Contract, unless (1) such representations are expressly stated in the Contract, and (2) the Contract expressly provides that the responsibility therefore is assumed by the CITY.

**3.2 INFORMATION ON SITE CONDITIONS**

- A. General: Information obtained by the CITY regarding site conditions, subsurface information, groundwater elevations, existing construction of site facilities as applicable, and similar data will be available for inspection at the office of the CITY upon request. Such information is offered as supplementary information only. The CITY does not assume any responsibility for the completeness or interpretation of such supplementary information.
- B. CONTRACTOR and their staff will receive a documented orientation of the various chemicals currently in use within the facility and where to meet should an alarm be activated.

**3.3 UTILITIES**

- A. The CONTRACTOR shall be responsible for determining and/or confirming, at his cost, the locations of all utilities within the project area, and shall be responsible for contacting each utility for location and notification prior to commencing work.
- B. The CONTRACTOR shall contact potentially affected utilities as provided in Section 01060, Regulatory Requirements & Permits.
- C. The CONTRACTOR shall contact Sunshine State One Call at 1-800-432-4770 or visit [www.callsunshine.com](http://www.callsunshine.com) at two (2) full business days

## TREATMENT PLANT CONCRETE REPAIR

## PROJECT 12170 &amp; 12181

prior to any excavation and make arrangements for locating all utilities in the project area.

## 3.4 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTIES AND SERVICE

- A. Where the CONTRACTOR's operations could cause damage or inconvenience to utilities, telephone, television, power, water, or sewer systems, the operations shall be suspended until all arrangements necessary for the protection of these utilities and services have been made by the CONTRACTOR with the owner of the utility affected.
- B. Notify all utility offices which are affected by the construction operation at least 2 working days in advance. Under no circumstances expose any utility without first obtaining permission from the appropriate agency. Once permission has been granted, locate, expose, and provide temporary support for all existing underground utilities.
- C. The CONTRACTOR shall be solely and directly responsible to the CITY and operators of such properties for any damage, injury, expense, loss, inconvenience, delay, suits, actions, or claims of any character brought because of any injuries or damage which may result from the construction operations under this Contract.
- D. Neither the CITY nor its officers or agents shall be responsible to the CONTRACTOR for damages as a result of the CONTRACTOR's failure to protect utilities encountered in the work.
- E. In the event of interruption to domestic water, sewer, storm drain, or other utility services as a result of accidental breakage due to construction operations, promptly notify the proper authority. Cooperate with said authority in restoration of service as promptly as possible and bear all costs of repair. In no case shall interruption of any water or utility service be allowed to exist outside working hours unless prior approval is granted.
- F. The CONTRACTOR shall replace, at his own expense, all existing utilities or structures removed or damaged during construction, unless otherwise provided for in these Contract documents or ordered by the CITY.

## 3.5 INTERFERING STRUCTURES

- A. Take necessary precautions to prevent damage to existing structures whether on the surface, aboveground, or underground.
- B. Protect underground and aboveground existing structures from damage, whether or not they lie within the limits of the easements obtained by the CITY. Where such existing fences, gates, sheds, buildings, or any other structure must be removed in order to properly carry out the construction, or are damaged during construction, restore to their original condition to the satisfaction of the property owner involved at the CONTRACTOR's own expense. Notify the CITY of any damaged underground structure, and make repairs or replacements before backfilling.

## GENERAL REQUIREMENTS

01001-4

CAM #17-1080

Exhibit 3

Page 83 of 271

## TREATMENT PLANT CONCRETE REPAIR

## PROJECT 12170 &amp; 12181

- C. Without additional compensation, the CONTRACTOR may remove and shall replace in a condition as good as or better than original, such small miscellaneous structures as fences, mailboxes, and signposts that interfere with the CONTRACTOR's operations.

**PART 4 SAFETY AND CONVENIENCE****4.1 ACCIDENT REPORTS**

- A. In addition, the CONTRACTOR must promptly report in writing to the CITY all accidents whatsoever arising out of, or in connection with, the performance of the work whether on, or adjacent to, the site, giving full details and statements of witnesses. If death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to the CITY.
- B. If a claim is made by anyone against the contractor or any subcontractor on account of any accident, the CONTRACTOR shall promptly report the facts in writing to the CITY, giving full details of the claim.

**4.2 SAFE ACCESS BY FEDERAL, STATE, AND LOCAL GOVERNMENT OFFICIALS**

- A. Authorized representatives of the state, federal, or local governmental agencies, shall at all times have safe access to the work, and the CONTRACTOR shall provide proper facilities for such access and inspection.

**4.3 PROTECTION OF PROPERTY**

- A. The CONTRACTOR shall identify and isolate his active work zone in such a manner as to exclude all personnel not employed by him, and the CITY.
- B. All CONTRACTOR staff coming on site shall wear identification badges at all times and/or have a security background check prior to accessing the plant.

**4.4 FIRE PREVENTION AND PROTECTION**

- A. The CONTRACTOR shall perform all work in a fire-safe manner. He shall supply and maintain on the site adequate fire-fighting equipment capable of extinguishing incipient fires. The CONTRACTOR shall comply with applicable federal, state, and local fire-prevention regulations. Where these regulations do not apply, applicable parts of the National Fire Prevention Standard for Safeguarding Building Construction Operations (NFPA No. 241) shall be followed.

**4.5 ACCESS FOR POLICE, FIRE, AND POSTAL SERVICE**

- A. Do not block off emergency vehicle access. Conduct operations with the least interference to fire equipment access, and at no time prevent such access.
- B. The CONTRACTOR shall leave a night emergency telephone number or numbers with the police department and the CITY, so that contact may be made easily at all times in case of barricade and flare trouble or other emergencies.

**GENERAL REQUIREMENTS**

01001-5

CAM #17-1080

Exhibit 3

Page 84 of 271



## TREATMENT PLANT CONCRETE REPAIR

PROJECT 12170 &amp; 12181

- C. Maintain postal service facilities in accordance with the requirements of the U.S. Postal Service. Move mailboxes to temporary locations designated by the U.S. Postal Service, and at the completion of the work in each area, replace them in their original location and in a condition satisfactory to the U.S. Postal Service.

**PART 5      PRESERVATION, RESTORATION AND CLEANUP****5.1      SITE RESTORATION AND CLEANUP**

- A. At all times during the work, keep the premises clean and orderly, and upon completion of the work, repair all damage caused by equipment and leave the project free of rubbish or excess materials of any kind.
- B. Stockpile excavated materials in a manner that will cause the least damage to adjacent lawns, grassed areas, gardens, shrubbery, or fences, regardless of whether these are on private property, or on state, county, or city rights-of-way. Remove all excavated materials from grassed and planted areas, and leave these surfaces in a condition equivalent to their original condition.

**5.2      FINISHING OF SITE, BORROW, AND STORAGE AREAS**

- A. Upon completion of the project, all areas used by the CONTRACTOR shall be properly cleared of all temporary structures, rubbish, and waste materials and properly graded to drain and blend in with the abutting area. Areas used for the deposit of waste materials shall be finished to properly drain and blend with the surrounding terrain. Grassed areas shall be restored as specified.

**5.3      PERMIT**

- A. Permits obtained by the CITY are not required for this work, which consists of minor repairs.
- B. Permits to be obtained by the CONTRACTOR include, but are not limited To the following:
  - 1. Local, County, and State contracting licenses.
- C. The CONTRACTOR shall comply with all applicable permit conditions.

**5.4      ISO 14001 CONDITIONS**

- A. The CONTRACTOR shall complete the checklists listed below and comply with the City's commitment to implement ISO 14001 and ISO 9001 compliant procedures.
  - 1. COFL-GTL-EP-4.4.5-1(F) Blank Procedure Template
  - 2. FL-GTL-ED-4.4.6-4 (F) Contractor Management Environment Manual

**- END OF SECTION -**

## TREATMENT PLANT CONCRETE REPAIR PROJECT

Nos. 12170 &amp; 12181

## SECTION 01003 - INTENT OF DRAWINGS AND SPECIFICATIONS

PART 1 -- GENERAL

## 1.01 THE REQUIREMENT

- A. Intent of specifications and drawings is to cover an installation complete in every respect. It is not intended to give every detail on drawings and in specifications. The CITY will not be responsible for absence of any detail which the CONTRACTOR may require, nor for any special construction which may be found necessary as work progresses. If an item is either indicated or specified, it shall be considered sufficient for inclusion of said item in contract. The CONTRACTOR shall furnish and install materials and equipment usually furnished with such systems, and as needed to complete an operating installation, whether mentioned or not, which are customary to its trade.
- B. Incidental accessories not usually shown or specified but which are necessary for the proper installation and operation shall be included in work without additional cost to the CITY, the same as if herein specified.
- C. Any apparatus, appliance, material or work not shown on but mentioned in the specifications, or vice versa, or any incidental accessories necessary to make the work complete and ready for operation, shall be furnished, delivered, and installed by the CONTRACTOR without additional cost to the CITY.
- D. Drawings are diagrammatic and indicate the general arrangement of systems and work indicated (do not scale the drawings). Consult the CITY for exact locations of fixtures, appurtenances, etc., where these items are not definitely located on the drawings.
- E. The CITY's interpretation of drawings and specifications shall be final and binding upon Contractor.
- F. The CONTRACTOR shall visit site prior to submitting bid, and thoroughly investigate and verify all conditions under which work shall be performed.

PART 2 -- PRODUCTS

(NOT USED)

PART 3 -- EXECUTION

(NOT USED)

- END OF SECTION -

INTENT OF DRAWINGS AND SPECIFICATIONS

01003-1

CAM #17-1080

Exhibit 3

Page 86 of 271

## PROJECT NOS. 12170 &amp; 12181

**SECTION 01005  
TECHNICAL PROVISIONS****PART 1 GENERAL****1.01 SCOPE**

- A. Work under this contract includes furnishing materials, labor, tools equipment, supervision and incidentals necessary to construct infrastructure improvements.

**1.02 ITEMS SPECIFIED ON DRAWINGS**

- A. Items of material may be specified on the Drawings and not in the Technical Specifications. The CONTRACTOR shall provide such items in accordance with the General Notes on the Drawings.

**1.05 POWER**

- A. The CITY will furnish electrical power required for the repairs. The CITY may require the CONTRACTOR to provide his own electrical power if the CONTRACTOR's use of CITY provided electrical power is wasteful, in the opinion of the CITY.

**1.06 WATER SUPPLY**

- A. The CITY will furnish water required for the repairs. The CITY may require the CONTRACTOR to provide his own water if the CONTRACTOR's use of CITY provided water is wasteful, in the opinion of the CITY.

Each water service line shall be provided with a backflow preventer which shall meet the requirements of ASA A40.6, latest revision, and the local administrative authority.

**1.07 MAINTENANCE**

- A. The CONTRACTOR shall fully cooperate at all times with the CITY in order to maintain the operation of the existing water and/or sewer system with the least amount of interference and interruption possible. The schedule, plans and work of the CONTRACTOR shall at all times be subject to alteration and revision if necessary for public health and safety considerations. The creation of a public nuisance will not be permitted.
- B. It may be necessary to interrupt the operation of the existing water and/or sewer system. In all cases where the CONTRACTOR must cause an interruption, CONTRACTOR shall prepare and submit to the CITY ENGINEER four (4) working days prior to commencing the work, a complete description of the proposed procedure and a time schedule, which CONTRACTOR will guarantee. At least forty-eight (48) hours prior to the time proposed for starting the work, the CITY ENGINEER will notify the CONTRACTOR whether or not the work will be permitted as proposed.

## PROJECT NOS. 12170 &amp; 12181

1. The CITY reserves the right to require the CONTRACTOR to work 24 hours per day in all cases where, in the CITY's opinion, interference with operation of the system may result in dangerous health hazards or offensive conditions.
2. In no case will the CONTRACTOR be permitted to interfere with the existing system until all materials, supplies, equipment, tools and incidentals necessary to complete the work are on the site. Backup equipment on key equipment items shall be required on work necessitating interference with the existing system.

## 1.08 SITE RESTORATION

- A. The CONTRACTOR shall remove all excess material and shall clean up and restore the site to its original condition or better. All damage, as a result of work under this Contract, done to existing structures, pavement, driveways, paved areas, curbs and gutters, sidewalks, shrubbery, grass, trees, utility poles, utility pipe lines, conduits, drains, catch basins, flagstones, rocked, graveled, or stabilized areas of driveways, and including all obstructions not specifically named herein, shall be repaired, or replaced, as determined by the CITY. Site restoration shall be done in a timely manner as the work progresses. Site restoration work shall be completed on private property within 30 calendar days after being disturbed.

## 1.09 SANITARY FACILITIES

- A. The CONTRACTOR shall provide temporary facilities at the site as directed by the CITY.

## 1.10 STANDARDS

- A. Wherever in these TECHNICAL SPECIFICATIONS or in the drawings name and/or number refer to certain standards or regulations, the applicable publication shall be the latest revision thereof.

## 1.11 QUALITY OF ITEMS

- A. All material furnished for this project shall be new and unused. Any material, which has become excessively weathered or damaged since manufacture, shall not be considered as new. CITY ENGINEER shall be the sole judge as to what constitutes excessive weathering or damage.

## 1.12 TESTING

- A. The City of Fort Lauderdale Engineering Minimum Design and Construction Standards may require that materials and equipment supplied meet given standards and testing to demonstrate conformance to the standards is a part of those standards. The cost of these tests shall be the obligation of the CONTRACTOR and no extra charge shall be made to the CITY on account of such testing.
- B. The CITY will select a recognized, independent testing laboratory to make tests on concrete, reinforcing steel, soils and other materials for the construction phase, which the CITY may decide to test for conformity with the TECHNICAL SPECIFICATIONS. The CONTRACTOR shall supply the necessary samples for this

## PROJECT NOs. 12170 &amp; 12181

testing without cost to the CITY. The costs for actual testing shall be paid directly to the testing laboratory by the CONTRACTOR.

- C. Construction in areas where installation and restoration must satisfy the additional requirements of a local, state or federal authority may require testing to demonstrate conformance. The CONTRACTOR shall ascertain the extent of testing required by regulatory agencies within these areas. The CONTRACTOR is responsible for performing such tests, including but not limited to, tests of compaction, and all costs for these tests shall be the obligation of the CONTRACTOR and no extra charge shall be made to the CITY on account of such testing.

### 1.13 BASIS OF MEASUREMENT

- A. Where items are to be paid for on a unit price per linear foot basis, the number of linear feet will be determined by measurement along the centerline of the item in place. Square footage and square yardage will be determined by the actual measurement of the installed quantities.

### 1.14 UTILITIES

- A. The CONTRACTOR shall preserve all existing utilities. If utility conflicts are encountered by the CONTRACTOR during construction, CONTRACTOR shall give sufficient notice to the CITY so that they may make the necessary adjustments. Damage to any utility, which in the opinion of the CITY is caused by carelessness on the part of the CONTRACTOR shall be repaired at the expense of the CONTRACTOR.

### 1.15 GUARANTEE

- A. The CONTRACTOR shall guarantee the equipment, material and labor performed under the Contract against any and all failures in proper use and operation for a period of one (1) year from date of written acceptance by the CITY.
- B. The CONTRACTOR shall also obtain warranties from manufacturers for each type of material furnished so that the manufacturer's warranty fully covers the equipment for a period of one (1) year from the date of written acceptance by the CITY, unless otherwise specified in the specifications.

### 1.16 PERFORMANCE OF WORK

- A. The CONTRACTOR shall provide all personnel and equipment required to complete all work specified herein and on the Drawings. In an emergency situation, if the CITY determines that it must provide staff and/or equipment to assist the CONTRACTOR in the satisfactory performance of the Contract terms and conditions, the CONTRACTOR shall reimburse the CITY at the applicable prevailing wage rates.
- B. CONTRACTOR shall provide forty-eight (48) hours advance written notice to the CITY for approval of CONTRACTOR's intention to work overtime on weekdays or to work on the weekends.

### 1.17 BARRICADING (SAFETY)

## TECHNICAL PROVISIONS

## PROJECT NOS. 12170 &amp; 12181

- A. The CONTRACTOR shall be responsible for the furnishing and maintaining of all required barricades, either the lighted or the reflector type, to ensure the public's and CITY staff's safety during open trench work or for any other potentially unsafe or hazardous construction activities. Barricades shall be located and displayed in conformance with the most stringent regulations required by the governing agencies. All costs for barricading, including any permits, shall be the responsibility of the CONTRACTOR.
- B. All work in public rights-of-way and on private property shall be done in strict compliance with these specifications and Florida Department of Transportation Minimum Standards. Failure to so comply will result in cessation of operations and the removal of project related obstructions from the right-of-way until compliance is achieved.

**1.18 EMERGENCY ACCESS AND SECURITY**

- A. In order to provide protection to the workers and residents, the CONTRACTOR shall maintain emergency access to the property at all times during construction. These access ways shall be protected and delineated with lighted barricades or other such devices as required.
- B. No trenches or holes shall be left open after working hours. In the event a trench must be left open after hours, it shall be done so only with the express written permission from the CITY, and it shall be the CONTRACTOR's responsibility to provide proper protection of the open trench or hole as required by the regulatory agency.. In addition to this provision the CONTRACTOR shall maintain trench safety and comply with current OSHA regulations and the Trench Safety Act. The CONTRACTOR shall maintain and keep all safety barricades, signage, flashers, and detours, in operating condition.
- C. All roads are to be maintained during the described construction as to always allow Emergency Access. No roads may be blocked inside the plant area.

**1.19 REPORTING OF DAMAGE CLAIMS**

- A. The CONTRACTOR shall keep the CITY informed of any damage claims made against the CONTRACTOR during the construction period. All claims for automobile damage, property damage/bodily injury will be reported to the CONTRACT ADMINISTRATOR within 24 hours of receipt of notice. CONTRACTOR will conduct a timely investigation of the claim and determine if they will honor the claim and/or report to their insurance carrier. CONTRACTOR will advise the City of Fort Lauderdale in writing of their decision/referral to carrier.

**PART 2 PRODUCTS (Not Applicable)****PART 3 EXECUTION (Not Applicable)**

**- END OF SECTION -**

## PROJECT NOs. 12170 &amp; 12181

## SECTION 01010 - SUMMARY OF WORK

PART 1 -- GENERAL

## 1.01 THE REQUIREMENT

- A. The work to be performed under this Contract shall consist of furnishing of all tools, equipment, materials, supplies, manufactured articles, transportation and services, including fuel, power, water, and essential communications, for the performance of all labor, work, testing and/or other operations as required for the fulfillment of the Contract in strict accordance with the Contract Documents. The work shall be complete, and all work, materials, and services not expressly shown or called for in the Contract Documents which may be necessary for the complete and proper execution of the contract in good faith shall be performed, furnished, and/or provided by the CONTRACTOR as though originally so specified or shown, at no increase in cost to the CITY.
- B. Wherever the Contract Documents address a third party, i.e., subcontractor, manufacturer, etc., it is to be considered as the CONTRACTOR through the third party.
- C. Wherever a reference to number of days is noted, it shall be construed to mean calendar days.
- D. The CONTRACTOR is advised that the work is to be performed in fully operational water and waste water treatment facilities, which serve the City of Fort Lauderdale and associated communities. Work activities will be around equipment active in the treatment process. The CONTRACTOR shall be fully responsible for all precautionary measures together with all remediation, cleanup, disinfection, regulatory agency fines and all other labor, materials, and costs associated with any contamination of the potable water supply or interruption of the treatment process caused directly or indirectly by the activities of the CONTRACTOR in the performance of the work.
- E. Notwithstanding other indemnification requirements of the Contract Documents, the CONTRACTOR shall also indemnify, defend, and hold harmless the CITY and the CITY's agents from any and all legal action which may arise from contamination of the potable water supply or interruption of treatment processes caused directly or indirectly by the CONTRACTOR in the performance of the work.

## 1.02 WORK COVERED BY CONTRACT DOCUMENTS

- A. The work includes, but is not limited to, all site work, concrete, metals, temporary utilities and surface restoration described in the Specifications. The following provides a brief summary of the major elements that are covered by the documents.

Repair dry cracks, repair leaking cracks, repair areas of spalled concrete, replace damaged concrete, replace areas of delaminated stucco, and repair/replace failing expansion joints where indicated by the CITY.

- B. The work under this Contract is described in the technical specifications and titled as follows:

PROJECT 12170 and 12181, CONCRETE REPAIR AT THE WATER AND WASTEWATER TREATMENT PLANTS.

## PROJECT NOs. 12170 &amp; 12181

## C. The work is located at the following locations:

1. FIVEASH WATER TREATMENT PLANT  
949 Northwest 38<sup>TH</sup> Street  
Fort Lauderdale, Florida 33309
2. GEORGE T. LOHMEYER REGIONAL WASTEWATER TREATMENT PLANT  
1801 Eisenhower Drive  
Fort Lauderdale, Florida 33316
3. WALTER E. PEELE-DIXIE WATER TREATMENT PLANT  
1500 South State Road 7  
Fort Lauderdale, Florida 33312

## 1.03 WORK BY OTHERS

- A. The CONTRACTOR's attention is directed to the fact that other entities will conduct other work at the site(s) during the performance of the work under this Contract. The CONTRACTOR shall conduct its operations so as to cause a minimum of interference with the work of such other entities, and shall cooperate fully with such entities to provide continued safe access to their respective portions of the site, as required to perform their respective contracts.
- B. Interference with Work on Utilities: The CONTRACTOR shall cooperate fully with all utility forces of the CITY or forces of other public or private agencies engaged in the relocation, altering, or otherwise rearranging of any facilities which interfere with the progress of the work, and shall schedule the work so as to minimize interference with said relocation, altering, or other rearranging of facilities.

## 1.04 CONTRACTOR USE OF PROJECT SITE

- A. The CONTRACTOR shall confine his operations within the Contract limits shown on the Drawings and/or property lines and/or fence lines. Storage of equipment and materials, or erection and use of sheds outside of the Contract limits, if such areas are the property of the CITY, shall be used only with the CITY's approval. Such storage or temporary structures, even within the Contract's limits, shall be confined to the CITY's property and shall not be placed on properties designated as easements or rights-of-way unless specifically permitted elsewhere in the Contract Documents.

## 1.05 CITY USE OF THE PROJECT SITE

- A. The CITY may utilize all or part of the facilities during the entire period of construction for the conduct of the CITY's normal operations. The CONTRACTOR shall cooperate with the CITY to minimize interference with the CONTRACTOR's operations and to facilitate the CITY's operations.
- B. The CITY may check all or any portion of the work and the CONTRACTOR shall afford all necessary assistance to the CITY in carrying out any such checks. Any necessary corrections to the work shall be immediately made by the CONTRACTOR. Such checking by the CITY shall not relieve the CONTRACTOR of any responsibilities for the accuracy or completeness of his work.



## PROJECT NOS. 12170 &amp; 12181

## 1.06 DIMENSIONS OF EXISTING FACILITIES

- A. Where the dimensions and locations of existing improvements are of critical importance in the installation or connection of new work, the CONTRACTOR shall verify such dimensions and locations in the field prior to the fabrication and/or installation of materials or equipment, which are dependent on the correctness of such information.
- B. The CITY may check all or any portion of the work and the CONTRACTOR shall afford all necessary assistance to the CITY in carrying out such checks. Any necessary corrections to the work shall be immediately made by the CONTRACTOR. Such checking by the CITY shall not relieve the CONTRACTOR of any responsibilities for the accuracy or completeness of his work.

## 1.07 FIRE PROTECTION

- A. CONTRACTOR shall take all necessary precautions to prevent fires at or adjacent to the work, buildings, etc., and shall provide adequate facilities for extinguishing fires which do occur.
- B. When fire or explosion hazards are created in the vicinity of the work as a result of the locations of fuel tanks, or similar hazardous utilities or devices, the CONTRACTOR shall immediately alert the local Fire Marshal, and the CITY of such tank or device. The CONTRACTOR shall exercise all safety precautions and shall comply with all instructions issued by the Fire Marshal and shall cooperate with the CITY of the tank or device to prevent the occurrence of fire or explosion.

## 1.08 CHEMICALS

- A. All chemicals used during project construction or furnished for project operation, whether herbicide, pesticide, disinfectant, polymer, or reactant of other classification, must show approval of either the EPA or USDA. Use of all such chemicals and disposal of residues shall be in strict conformance with all applicable rules and regulations.

## 1.09 FIRST AID FACILITIES AND ACCIDENTS

- A. First Aid Facilities: The CONTRACTOR shall provide at the site such equipment and facilities as are necessary to supply first aid to any of his personnel who may be injured in connection with the work.
- B. Accidents:
  - 1. The CONTRACTOR shall promptly report, in writing, to the CITY all accidents whatsoever out of, or in connection with, the performance of the work, whether on or adjacent to the site, which cause death, personal injury or property damage, giving full details and statements of witnesses.
  - 2. If death, serious injuries, or serious damages are caused, the accident shall be reported immediately by telephone or messenger to the CITY.
  - 3. If any claim is made by anyone against the CONTRACTOR or a Subcontractor on account of any accidents, the CONTRACTOR shall promptly report the facts, in writing, to the CITY, giving full details of the claim.

## PROJECT NOs. 12170 &amp; 12181

## 1.10 ULTIMATE DISPOSITION OF CLAIMS BY ONE CONTRACTOR ARISING FROM ALLEGED DAMAGE BY ANOTHER CONTRACTOR

- A. During the progress of the work, other contractors may be engaged in performing other work or may be awarded other Contracts for additional work on this project. In that event, the CONTRACTOR shall coordinate the work to be done hereunder with the work of such other contractors and the CONTRACTOR shall fully cooperate with such other contractors and carefully fit its own work to that provided under other Contracts as may be directed by the CITY. The CONTRACTOR shall not commit or permit any act which will interfere with the performance of work by any other CONTRACTOR.
- B. If the CITY shall determine that the CONTRACTOR is failing to coordinate his work with the work of the other contractors as the CITY directed, then the CITY shall have the right to withhold any payments otherwise due hereunder until the CONTRACTOR completely complies with the CITY's directions.
- C. If the CONTRACTOR notifies the CITY in writing that another CONTRACTOR is failing to coordinate his work with the work of this Contract as directed, the CITY will promptly investigate the charge. If the CITY finds it to be true, he will promptly issue such directions to the other CONTRACTOR with respect thereto as the situation may require. The CITY, nor any of their agents shall not, however, be liable for any damages suffered by the CONTRACTOR by reason of the other contractor's failure to promptly comply with the directions so issued by the CITY, or by reason of another contractor's default in performance, it being understood that the CITY does not guarantee the responsibility or continued efficiency of any CONTRACTOR.
- D. The CONTRACTOR shall indemnify and hold the CITY harmless from any and all claims of judgments for damages and from costs and expenses to which the CITY may be subjected or which it may suffer or incur by reason of the CONTRACTOR's failure to comply with the CITY's directions promptly.
- E. Should the CONTRACTOR sustain any damage through any act or omission of any other CONTRACTOR having a Contract with the CITY for the performance of work upon the site or of work which may be necessary to be performed for the proper execution of the work to be performed hereunder, or through any act or omission of a Subcontractor of such Contract, the CONTRACTOR shall have no claim against the CITY for such damage, but shall have a right to recover such damage from the other CONTRACTOR under the provision similar to the following provisions which have been or will be inserted in the Contracts with such other contractors.
- F. Should any other CONTRACTOR having or who shall hereafter have a Contract with the CITY for the performance of work upon the site sustain any damage through any act or omission of the CONTRACTOR hereunder or through any act or omission of any Subcontractor of the CONTRACTOR, the CONTRACTOR agrees to reimburse such other CONTRACTOR for all such damages and to defend at his own expense any suit based upon such claim and if any judgment or claims against the CITY shall be allowed, the CONTRACTOR shall pay or satisfy such judgment or claim and pay all costs and expenses in connection therewith and shall indemnify and hold the CITY harmless from all such claims.

## PROJECT NOS. 12170 &amp; 12181

- G. The CITY's right to indemnification hereunder shall in no way be diminished, waived or discharged, by its recourse to assessment of liquidated damages as provided in the Contract, or by the exercise of any other remedy provided for by Contract Documents or by law.

## 1.11 BLASTING AND EXPLOSIVES

- A. Blasting shall not be allowed.

## 1.12 WEATHER CONDITIONS

- A. No work shall be done when the weather is unsuitable. The CONTRACTOR shall take necessary precautions (in the event of impending storms) to protect all work, materials, or equipment from damage or deterioration due to floods, driving rain, or wind. The CITY reserves the right, through its opinion, to order that additional protection measures over and beyond those proposed by the CONTRACTOR, be taken to safeguard all components of the Project. The CONTRACTOR shall not claim any compensation for such precautionary measures so ordered, nor claim any compensation from the CITY for damage to the work from weather elements.
- B. The mixing and placing of concrete or pavement courses, the laying of masonry, and installation of sewers and water mains shall be stopped during rainstorms, if ordered by the CITY; and all freshly placed work shall be protected by canvas or other suitable covering in such manner as to prevent running water from coming in contact with it. Sufficient coverings shall be provided and kept ready at hand for this purpose. The limitations and requirements for mixing and placing concrete or laying of masonry, in cold weather shall be as described elsewhere in these Specifications.

## 1.13 PERIODIC CLEANUP: BASIC SITE RESTORATION

- A. Disposal of Debris: All debris, materials, piping, and miscellaneous waste products from the work described in this section shall be removed from the project as soon as possible and not less than twice per week. They shall be disposed of in accordance with applicable federal, state, and local regulations. The CONTRACTOR is responsible for determining these regulations and shall bear all costs or retain any profit associated with disposal of these items.
- C. The CONTRACTOR shall perform the cleanup work on a regular basis and as frequently as ordered by the CITY. Basic site restoration in a particular area shall be accomplished immediately following the installation or completion of the required facilities in that area. Furthermore, such work shall also be accomplished, when ordered by the CITY, if partially completed facilities must remain incomplete for some time period due to unforeseen circumstances.
- D. Upon failure of the CONTRACTOR to perform periodic cleanup and basic restoration of the site to the CITY's satisfaction, the CITY may, upon five (5) days prior written notice to the CONTRACTOR, without prejudice to any other rights or remedies of the CITY, cause such work for which the CONTRACTOR is responsible to be accomplished to the extent deemed necessary by the CITY, and all costs resulting therefrom shall be charged to the CONTRACTOR and deducted from the amounts of money that may be due him.

## PROJECT NOS. 12170 &amp; 12181

## 1.14 USE OF FACILITIES BEFORE COMPLETION

- A. The CITY reserves the right to enter and use any portion of the constructed facilities before final completion of the whole work to be done under this Contract. However, only those portions of the facilities which have been completed to the CITY's satisfaction, as evidenced by issuing a Certificate of Substantial Completion covering that part of the work.
- B. It shall be the CITY's responsibility to prevent premature connections to or use of any portion of the installed facilities by private or public parties, persons or groups of persons, before the CITY issues the Certificate of Substantial Completion covering that portion of the work to be placed in service.
- C. Consistent with the approved progress schedule, the CONTRACTOR shall cooperate with the CITY, and his agents to accelerate completion of those facilities, or portions thereof, which have been designated for early use by the CITY.

## 1.15 CHLORINE EMERGENCY PREPARATION

- A. The Contractor's attention is directed to the CITY's policy of conducting periodic chlorine emergency drills at the project site. The drills are intended to ensure readiness to respond to a potential emergency due to the leakage of chlorine gas (which is a toxic substance) from the Chlorine Railcar and Chlorine Cylinder storage areas. The Contractor shall designate an on-site member of his staff that will be trained by the CITY and be responsible for ensuring that the Contractor's and subcontractor's personnel fully participate in the drills and are prepared to deal with a potential emergency.

## 1.16 POLLUTANT STORAGE SYSTEM SPECIALTY CONTRACTOR (PSSSC)

- A. If required for compliance with Broward County (and/or State of Florida) construction permits (and/or licenses / registrations), the CONTRACTOR shall retain a Pollutant Storage System Specialty Contractor (PSSSC), licensed with the State of Florida, to construct the elements required by the Broward County (and/or State of Florida) construction permits (and/or licenses / registrations). It is the responsibility of the CONTRACTOR to determine if they need to retain a PSSSC prior to bidding.

PART 2 -- PRODUCTS (Not Applicable)PART 3 -- EXECUTION (Not Applicable)

- END OF SECTION -

## PROJECT NOS. 12170 &amp; 12181

## SECTION 01025 - MEASUREMENT AND PAYMENT

PART 1 -- GENERAL

## 1.01 SUMMARY

- A. Payment for the various items in the Schedule of Payment items, as further specified herein, shall include all compensation to be received by the CONTRACTOR for mobilizing, furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, taxes, materials, commissions, transportation and handling, bonds, permit fees, insurance, overhead and profit, and incidentals appurtenant to the items of Work being described, as necessary to complete the various items of the Work, all in accordance with the requirements of the Contract Documents, including all appurtenances thereto, and including all costs of compliance with the regulations of public agencies having jurisdiction, including Safety and Health Requirements of the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA). Such compensation shall also include payment for any loss or damages arising directly or indirectly from the Work.
- B. The CONTRACTOR's attention is called to the fact that quotations for the various items of Work are intended to establish a total price for completing the Work in its entirety. Should the CONTRACTOR feel that the cost for any item of Work has not been established by the Schedule of Payment items or this Section, it shall include the cost for that Work in some other applicable bid item, so that its proposal for the project does reflect its total price for completing the Work in its entirety.

## 1.02 SUBMITTALS

- A. Informational:
  - 1. Schedule of Values.
  - 2. Application for Payment (Submit on OWNER's form).
  - 3. Final Application for Payment.
- B. Submittals shall be in accordance with Section 01300 entitled "Submittals" and the article titled "Payment Procedures" in the City of Fort Lauderdale Construction Agreement.

## 1.03 SCHEDULE OF VALUES

- A. Prepare a schedule of values for the Work.
- B. Unit Price Work: Reflect unit price quantity and price breakdown from conformed Bid Form.

## PROJECT NOS. 12170 &amp; 12181

- C. An unbalanced or front-end loaded schedule will not be acceptable.
- D. Summation of the complete schedule of values representing all the Work shall equal the Contract Price.

## 1.04 APPLICATION FOR PAYMENT

- A. Transmittal Summary Form: Attach one Summary Form with each detailed Application for Payment and include Request for Payment of Materials and Equipment on Hand as applicable. Execute certification by authorized officer of CONTRACTOR.
- B. Use detailed Application for Payment Form provided by CITY.
- C. Include accepted schedule of values for each portion of Work and the unit price breakdown for the Work to be paid on unit price basis, and a listing of OWNER-selected equipment, if applicable, and allowances, as appropriate.
- D. Preparation:
  - 1. List each Change Order and Written Amendment executed prior to date of submission as separate line item. Totals to equal those shown on the Transmittal Summary Form.
  - 2. Submit Application for Payment, including a Transmittal Summary Form and detailed Application for Payment Form, a listing of materials on hand as applicable, and such supporting data as may be requested by CITY.

## 1.05 MEASUREMENT—GENERAL

- A. Weighing, measuring, and metering devices used to measure quantity of materials for Work shall be suitable for purpose intended and conform to tolerances and Specifications as specified in National Institute of Standards and Technology, Handbook 44.
- B. Whenever pay quantities of material are determined by weight, material shall be weighed on scales furnished by CONTRACTOR and certified accurate by state agency responsible. Weight or load slip shall be obtained from weigher and delivered to CITY representative at point of delivery of material.
- C. If material is shipped by rail, car weights will be accepted provided that actual weight of material only will be paid for and not minimum car weight used for assessing freight tariff, and provided further that car weights will not be acceptable for material to be passed through mixing plants.
- D. Vehicles used to haul material being paid for by weight shall be weighed empty daily and at such additional times as required by CITY. Each vehicle shall bear a plainly legible identification mark.

## PROJECT NOS. 12170 &amp; 12181

- E. Materials that are specified for measurement by the cubic yard measured in the vehicle shall be hauled in vehicles of such type and size that actual contents may be readily and accurately determined. Unless all vehicles are of uniform capacity, each vehicle must bear a plainly legible identification mark indicating its water level capacity. Vehicles shall be loaded to at least their water level capacity. Loads hauled in vehicles not meeting above requirements or loads of a quantity less than the capacity of the vehicle, measured after being leveled off as above provided, will be subject to rejection, and no compensation will be allowed for such material.
- F. Units of measure shown on Bid Form shall be as follows, unless specified otherwise. All methods of measurement shall be approved by the CITY.

Item	Method of Measurement
AC	Acre—Field Measure
CY	Cubic Yard—Field Measure within limits specified or shown, or measured in vehicle by volume, as specified
EA	Each—Field Count
GAL	Gallon—Field Measure
HR	Hour
LB	Pound(s)—Weight Measure by Scale
LF	Linear Foot—Field Measure
LS	Lump Sum—Unit is one; no measurement will be made
SF	Square Foot
SY	Square Yard
TON	Ton—Weight Measure by Scale (2,000 pounds)

- G. The CONTRACTOR shall include mobilization and demobilization in their bid price.

## 1.06 PAYMENT

## A. General:

1. Progress payments will be made monthly.
2. The date for CONTRACTOR's submission of monthly Application for Payment shall be established at the Preconstruction Conference.
3. The CONTRACTOR shall be solely and directly responsible to the CITY and operators of utilities, telephone, television, power, water, or sewer systems for any damage, injury, expense, loss, inconvenience, delay, suits, actions, or claims of any character brought because of any injuries or damage which may results from the construction operations under this Contract.

## PROJECT NOS. 12170 &amp; 12181

4. Neither the CITY nor its officers or agents shall be responsible to the CONTRACTOR for damages as a result of the CONTRACTOR's failure to protect utilities encountered in the Work.

- B. Payment for unit price items covers all the work necessary to furnish and install the following items:

ITEM	DESCRIPTION
Type 1 Concrete Repair (S1):	<p>Measurement and payment for Type 1 concrete repair will be based upon actual quantity per square foot of Type 1 concrete repair as witnessed in the field and in accordance with the requirements of the contract documents and construction drawings.</p> <p>Payment for Type 1 concrete repair will be made at the unit price per square foot named in the bid documents, and shall constitute full compensation for all materials, labor, tools, equipment, restoration, painting and all incidentals to perform Type 1 concrete repairs for all concrete surfaces with no exposed reinforcement.</p> <p><b>Type 1 Concrete Repair</b> <b>CY</b></p>
Type 2 Concrete Repair (S2):	<p>Measurement and payment for Type 2 concrete repair will be based upon actual quantity per square foot of Type 2 concrete repair as witnessed in the field and in accordance with the requirements of the contract documents and details.</p> <p>Payment for Type 2 concrete repair will be made at the unit price per square foot named in the bid documents, and shall constitute full compensation for all materials, labor, tools, equipment, restoration, painting and all incidentals to perform Type 2 concrete repairs for all concrete surfaces with spalling to the depth of the rebar.</p> <p><b>Type 2 Concrete Repair</b> <b>SF</b></p>



## PROJECT NOS. 12170 &amp; 12181

Type 3 Concrete Repair (S3/S4):	<p>Measurement and payment for Type 3 concrete repair will be based upon actual quantity per square foot of Type 3 concrete repair as witnessed in the field and in accordance with the requirements of the contract documents and details.</p> <p>Payment for Type 3 concrete repair will be made at the unit price per square foot named in the bid documents, and shall constitute full compensation for all materials, labor, tools, equipment, restoration, painting and all incidentals to perform Type 3 concrete repairs for all concrete surfaces with loss of reinforcement steel greater than 20% of the cross sectional area</p> <p><b>Type 3 Concrete Repair</b> <b>SF</b></p>
Leak Repair (S5):	<p>Measurement and payment for leak repair will be based upon the actual quantity per linear foot of leaks repaired as witnessed in the field and in accordance with the requirements of the contract documents and details.</p> <p>Payment for repair of leaks will be made at the unit price per linear foot named in the bid documents and shall constitute full compensation for all materials, labor, tools, equipment, restoration, painting and all incidentals to perform the repairs as included in the detail exhibit.</p> <p><b>Leak Repair</b> <b>LF</b></p>
Crack Repair (S5):	<p>Measurement and payment for crack repair will be based upon the actual quantity per linear foot of cracks repaired as witnessed in the field and in accordance with the requirements of the contract documents and details.</p> <p>Payment for repair of cracks will be made at the unit price per linear foot named in the bid documents and shall constitute full compensation for all materials, labor, tools, equipment, concrete pH level test and all</p>

## PROJECT NOS. 12170 &amp; 12181

	<p>incidentals to perform the repairs as included in the detail exhibit.</p> <p><b>Crack Repair</b> <b>LF</b></p>
<p>Remove and Replace Concrete Posts</p> <p>See Exhibits</p>	<p>Measurement and payment for removal and replacement of concrete posts will be based upon the actual posts replaced as witnessed in the field and in accordance with the requirements of the contract documents and details.</p> <p>Payment for removal and replacement of concrete posts will be made at the unit price per item named in the bid documents and shall constitute full compensation for all materials, labor, tools, equipment, concrete pH level test and all incidentals to perform the repairs as included in the detail exhibit.</p> <p><b>Remove and Replace Posts</b> <b>EA</b></p>
<p>Expansion Joint Replacement</p> <p>See Exhibits</p>	<p>Measurement and payment for replacement of expansion joints will be based upon the actual quantity per linear foot of expansion joint replaced as witnessed in the field and in accordance with the requirements of the contract documents and details.</p> <p>Payment for replacement of expansion joints will be made at the unit price per linear foot named in the bid documents and shall constitute full compensation for all materials, labor, tools, equipment and all incidentals to perform the repairs as included in the detail exhibit.</p> <p><b>Expansion Joint Repair</b> <b>LF</b></p>
<p>Stucco Repair</p> <p>See Exhibits</p>	<p>Measurement and payment for stucco repair will be based upon the actual quantity per square foot of stucco repaired as witnessed in the field and in accordance with the requirements of the contract documents and details.</p> <p>Payment for repair of stucco will be made</p>

## PROJECT NOS. 12170 &amp; 12181

	<p>at the unit price per square foot named in the bid documents and shall constitute full compensation for all materials, labor, tools, equipment, concrete pH level test and all incidentals to perform the repairs as included in the detail exhibit.</p> <p><b>Stucco Repair</b> <b>SF</b></p>
<p>Louver Replacement</p> <p>See Exhibits</p>	<p>Measurement and payment for replacement of louvers will be based upon the actual quantity of louvers replaced as witnessed in the field and in accordance with the requirements of the contract documents and details.</p> <p>Payment for replacement of louvers will be made at the unit price per item named in the bid documents and shall constitute full compensation for all materials, labor, tools, equipment, material tests, restoration, painting and all incidentals to perform the repairs as included in the detail exhibit.</p> <p><b>Louver Replacement</b> <b>EA</b></p>
<p>Install Flashing</p> <p>See Exhibits</p>	<p>Measurement and payment for flashing installation will be based upon the actual quantity per linear foot of flashing installed as witnessed in the field and in accordance with the requirements of the contract documents and details.</p> <p>Payment for installation of flashing will be made at the unit price per linear foot named in the bid documents and shall constitute full compensation for all materials, labor, tools, equipment, restoration, paint and all incidentals to perform the repairs as included in the detail exhibit.</p> <p><b>Install Flashing</b> <b>LF</b></p>
<p>Concrete Slab Replacement</p> <p>See Exhibits</p>	<p>Measurement and payment for demolishing, removing and replacing will be based upon the actual quantity of concrete slabs removed and installed as witnessed in the field and in accordance</p>

## PROJECT NOS. 12170 &amp; 12181

	<p>with the requirements of the contract documents and details.</p> <p>Payment for removal and replacing concrete slabs will be made at the unit price per square foot shown in the bid documents and shall constitute full compensation for all materials, labor, tools, equipment, restoration, paint and all incidentals to perform the repairs as included in the detail exhibit.</p> <p><b>Concrete Slab Replacement</b> <b>SF</b></p>
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## 1.06 NONPAYMENT FOR REJECTED OR UNUSED PRODUCTS

## A. Payment will not be made for following:

1. Loading, hauling, and disposing of rejected material.
2. Quantities of material wasted or disposed of in manner not called for under Contract Documents.
3. Rejected loads of material, including material rejected after it has been placed by reason of failure of CONTRACTOR to conform to provisions of Contract Documents.
4. Material not unloaded from transporting vehicle.
5. Defective Work not accepted by CITY.
6. Material remaining on hand after completion of Work.
7. Mobilization and Demobilization

PART 2 -- PRODUCTS (Not Applicable)PART 3 -- EXECUTION (Not Applicable)

- END OF SECTION -

## PROJECT Nos. 12170 &amp; 12181

## SECTION 01040 - COORDINATION

PART 1 -- GENERAL

## 1.01 THE REQUIREMENT

- A. The CONTRACTOR shall allow the CITY or their agents, and other project CONTRACTORS or their agents, access to the work. The CONTRACTOR shall cooperate with all aforesaid parties and shall allow reasonable provisions for the execution of any other work by the CITY, or others, to be done in connection with his work, or in connection with normal use of the facilities.
- B. Each CONTRACTOR shall cooperate fully with the CITY and all other CONTRACTORS employed on the work, to effect proper coordination and progress to complete the project on schedule and in proper sequence. Insofar as possible, decisions of all kinds required from the CITY shall be anticipated by the CONTRACTOR to provide ample time for inspection, or the preparation of instructions.
- C. Each CONTRACTOR shall assume full responsibility for the correlation of all parts of his work with that of other CONTRACTORS. Each CONTRACTOR's superintendent shall correlate all work with other CONTRACTORS in the laying out of work. Each CONTRACTOR shall lay out his own work in accordance with the Drawings, Specifications, and instructions of latest issue and with due regard to the work of other CONTRACTORS.
- D. Periodic coordinating conferences shall be held in accordance with Section 01200, Project Meetings, of these Contract Documents.

## 1.02 SUBMITTALS

- A. Informational:
  - 1. Photographs:
    - a. Color Prints: Submit two copies, accompanied by negatives, within 5 days of being taken.
    - b. Video Recordings: Submit one copy within 5 days of being taken.

## 1.03 UTILITY NOTIFICATION AND COORDINATION

- A. Coordinate the Work with various utilities within Project limits. Notify applicable utilities prior to commencing Work.
  - 1. Contact Sunshine State One Call at 1-800-432-4770 at least 48 hours prior to any excavation.
- B. If damage occurs, or if conflicts or emergencies arise during Work, contact the appropriate utility.

## PROJECT Nos. 12170 &amp; 12181

1. Fiveash Water Treatment Plant
  - a. Contact Person: Maintenance Chief – Ed Rogers
  - b. Telephone: 954-828-7864
2. George T. Lohmeyer Regional Wastewater Treatment Plant
  - a. Contact Person: Maintenance Chief – Tom Fatout
  - Telephone: 954-828-4132
3. Walter E. Peele-Dixie Water Treatment Plant
  - a. Contact Person: Maintenance Chief – Don Hering
  - b. Telephone: 954-828-7502
4. Electricity Company: Florida Power and Light.
  - a. Contact Person: Ray Rynning
  - b. Telephone: (954) 321-2259
  - c. Mobile: (954) 275-1526
5. Telephone Company: AT&T.
  - a. Contact Person: Account Manager – Rick Rosenbaum.
  - b. Telephone: 954-838-1746.
6. Water and Sewer Department: Fort Lauderdale Public Services Department.
  - a. Contact Person: Emergency Hotline.
  - b. Telephone: 954-828-8000.
7. Cable TV: Comcast
  - a. Contact: Broward County Emergency Hotline
  - b. Telephone: 954-236-6210

## 1.05 ADJACENT FACILITIES AND PROPERTIES

## A. Examination:

1. After Effective Date of the Agreement and before Work at site is started, CONTRACTOR, CITY, and affected property owners and utility owners shall make a thorough examination of pre-existing conditions including existing buildings, structures, and other improvements in vicinity of Work, as applicable, which could be damaged by construction operations.
2. Periodic reexamination shall be jointly performed to include, but not limited to, cracks in structures, settlement, leakage, and similar conditions.

## B. Documentation:

1. Record and submit documentation of observations made on examination inspections in accordance with paragraphs CONSTRUCTION PHOTOGRAPHS and AUDIO-VIDEO RECORDINGS.
2. Upon receipt, CITY will review documentation and keep on file.

## COORDINATION

## PROJECT Nos. 12170 &amp; 12181

3. Such documentation shall be used as indisputable evidence in ascertaining whether and to what extent damage occurred as a result of CONTRACTOR's operations, and is for the protection of adjacent property owners, CONTRACTOR, and CITY.

## 1.06 CONSTRUCTION PHOTOGRAPHS

- A. Photographically document all unique portions of the construction repairs.
  - B. Photographs shall be digital.
  - C. The CITY shall have the right to select the subject matter and vantage point from which photographs are to be taken.
  - D. Construction Progress Photos:
    1. Photographically demonstrate progress of construction, showing every aspect of site and adjacent properties as well as interior and exterior of new or impacted structures.
    2. Monthly: Take digital photographs as necessary to fully document the work.
  - E. Photographs shall be submitted electronically.
3. Label Each Photograph with:
    - a. Project Name.
    - b. Date and time photo was taken.
    - c. Caption (maximum 30 characters).
    - d. Location and area designation.
    - e. Schedule activity number, as appropriate.

## 1.07 AUDIO-VIDEO RECORDINGS

- A. Prior to beginning Work on construction site or of a particular area of the Work, and again within 10 days following date of Substantial Completion, videograph construction site and areas adjacent to construction site.
- B. In the case of preconstruction recording, no Work shall begin in the area prior to CITY's review and approval of content and quality of video for that area.
- C. Particular emphasis shall be directed to physical condition of existing vegetation, structures, and pavements within the work area.
- D. The CITY shall have the right to select subject matter and vantage point from which videos are to be taken.
- E. Video Format and Quality:

## PROJECT Nos. 12170 &amp; 12181

1. DVD format or digital, with sound.
2. Video:
  - a. Produce bright, sharp, and clear images with accurate colors, free of distortion and other forms of picture imperfections.
  - b. Electronically, and accurately display the month, day, year, and time of day of the recording.
3. Audio:
  - a. Audio documentation shall be done clearly, precisely, and at a moderate pace.
  - b. Indicate date, Project name, and a brief description of the location of taping, including:
    - 1) Facility name;
    - 2) Street names or easements;
    - 3) Addresses of private property; and
    - 4) Direction of coverage.

## G. Documentation:

1. Video Label:
  - a. DVD number (numbered sequentially, beginning with 001).
  - b. Project Name.
  - c. Name of building included.
  - d. Applicable location by engineering stationing.
  - e. Date and time of coverage.
2. Project Video Log: Maintain an ongoing log that incorporates above noted label information for videos on the project.

PART 2 - PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

- END OF SECTION -



## PROJECT Nos. 12170 &amp; 12181

## SECTION 01050 -PROJECT MANAGEMENT

## PART 1 GENERAL

## 1.01 SUMMARY

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
  - 1. Special Project Procedures
  - 2. Project meetings.
  - 3. Requests for Information (RFIs).

## 1.04 COORDINATION

- A. Coordination: Coordinate construction operations included in different sections of the specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different sections that depend on each other for proper installation, connection, and operation.
  - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
  - 2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
  - 3. Make adequate provisions to accommodate items scheduled for later installation.
  - 4. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.
- B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
  - 1. Prepare similar memoranda for CITY and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
  - 1. Preparation of CONTRACTOR's Construction Schedule.

## PROJECT Nos. 12170 &amp; 12181

2. Preparation of the Schedule of Values.
3. Installation and removal of temporary facilities and controls.
4. Delivery and processing of submittals.
5. Progress meetings.
6. Project closeout activities.

## 1.05 SUBMITTALS

- A. Key Personnel Names: Within 5 days of notice to proceed, submit a list of key personnel assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home and office telephone numbers. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project.

## 1.06 SPECIAL PROJECT PROCEDURES

- A. Discrepancies, Errors: Should discrepancies or errors appear in the drawings or specifications concerning materials, workmanship, or quantity of work to be performed, the CONTRACTOR will be required to immediately notify the CITY before proceeding with the work. If the CONTRACTOR fails to notify the CITY and proceeds with the work, CONTRACTOR will be required to correct the errors at his/her own expense. In the event of a conflict between the drawings and specifications, the CITY will decide on the way to perform the work or supply the materials.
- B. Dimensions and Measurements: The figured dimensions on the drawings or notes including dimensions shall be used for construction instead of measurements of the drawings by scale. No scale measurements shall be used as a dimension for construction. Dimensions on all drawings as well as the detail drawings themselves are subject in every case to measurements of adjacent or previously completed work. All such measurements necessary shall be taken before undertaking any work dependent upon such data. Field verification of dimensions on plans is mandatory since actual locations, distances, and levels will be governed by actual field conditions.
- C. Discrepancies or Inconsistencies: Should any discrepancy or inconsistency appear between larger and smaller scale drawings in any of the divisions of the specifications or in any of the contract documents, such discrepancy shall be immediately submitted to the CITY for correction before proceeding with the work in question. In no case shall the CONTRACTOR make any alterations, erasures, changes or modifications in the drawings or specifications.
  1. Should it appear that any of the work as specified or shown by the drawings is not sufficiently detailed or explained, the CONTRACTOR shall apply to the CITY for such further details or information as may be necessary for full understanding of the work in question.

## PROJECT Nos. 12170 &amp; 12181

2. The data set forth in these specifications and indicated on the drawings are as accurate as can be obtained, but their extreme accuracy is not guaranteed. Final application thereto shall be determined on the job as conditions may demand and subject to the approval of the CITY.
- D. In the event a Subcontractor or Supplier notes a mistake or details appear incomplete, or if there are questions or concerns with the plans and specifications, the Subcontractor or Supplier will immediately notify the CONTRACTOR. No work will proceed until such conflicts or questions are resolved in writing.
- E. The Subcontractor will not be permitted to start work, nor will any Shop drawings/submittals be accepted for review from a supplier until a subcontractor identification form is received and approved by the CONTRACTOR and CITY. Also, the CITY will not process any pay request for the work of any Subcontractor or Supplier whose subcontractor identification form is not on file with the CITY.

## 1.07 REQUESTS FOR INTERPRETATION (RFIs)

- A. Procedure: Immediately on discovery of the need for interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.
  1. RFIs shall originate with CONTRACTOR. RFIs submitted by entities other than CONTRACTOR will be returned with no response.
  2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in CONTRACTOR's work or work of subcontractors.
- B. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following:
  1. CITY Project Number
  2. CITY Project Name.
  3. Date.
  4. Name of CONTRACTOR.
  5. RFI number, numbered sequentially.
  6. Specification Section number and title and related paragraphs, as appropriate.
  7. Drawing number and detail references, as appropriate.
  8. Field dimensions and conditions, as appropriate.
  9. CONTRACTOR's suggested solution(s). If CONTRACTOR's solution(s) impact the Contract Time or the Contract Sum, CONTRACTOR shall state impact in the RFI.

## PROJECT Nos. 12170 &amp; 12181

10. CONTRACTOR's signature.
11. Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.
  - a. Supplementary drawings prepared by CONTRACTOR shall include dimensions, thicknesses, structural grid references, and details of affected materials, assemblies, and attachments.
12. Identify each page of attachments with the RFI number and sequential page number.
- C. Software-Generated RFIs: Software-generated form with substantially the same content as indicated above. Word Template is available upon request from the CITY Engineer's Office.
  1. Attachments shall be electronic files in Adobe Acrobat PDF format.
- D. CITY will review each RFI, determine action required, and return it. Allow seven working days for CITY's response for each RFI. RFIs received after 1:00 p.m. will be considered as received the following working day.
  1. The following RFIs will be returned without action:
    - a. Requests for approval of submittals.
    - b. Requests for approval of substitutions.
    - c. Requests for coordination information already indicated in the Contract Documents.
    - d. Requests for adjustments in the Contract Time or the Contract Sum.
    - e. Requests for interpretation of Engineer's actions on submittals.
    - f. Incomplete RFIs or RFIs with numerous errors.
  2. CITY's action may include a request for additional information, in which case CITY's time for response will start again.
  3. CITY's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for CONTRACTOR to submit Change Proposal according to Division 01 Section "Contract Modification Procedures."
    - a. If CONTRACTOR believes the RFI response warrants change in the Contract Time or the Contract Sum, notify CITY in writing within 10 days of receipt of the RFI response.
- E. On receipt of CITY's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify CITY within seven days if CONTRACTOR disagrees with response.
- F. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log bi-weekly. Include the following:

## PROJECT Nos. 12170 &amp; 12181

1. Project name.
2. Name and address of CONTRACTOR.
3. RFI number including RFIs that were dropped and not submitted.
4. RFI description.
5. Date the RFI was submitted.
6. Date Engineer's response was received.
7. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

- END OF SECTION -

## PROJECT Nos. 12170 &amp; 12181

## SECTION 01152 - APPLICATIONS FOR PAYMENT

## PART 1 GENERAL

## 1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

## 1.02 SUMMARY

- A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.

## 1.03 DEFINITIONS

- A. Schedule of Values: A statement furnished by CONTRACTOR allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing CONTRACTOR's Applications for Payment.
  - 1. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual table of contents. Provide several line items for principal subcontract amounts, where appropriate.
  - 2. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
  - 3. Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
  - 4. Schedule Updating: Update and resubmit the Schedule of Values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

## 1.05 APPLICATIONS FOR PAYMENT

- A. The CONTRACTOR will make up a partial pay request using the CITY-supplied forms and submit the request to the CITY Representative.
- B. Each pay request must be accompanied by a partial release of lien by the CONTRACTOR and by all Subcontractors, suppliers, and for all labor. Starting with the second (2nd) pay request and for each and every pay request thereafter, the CONTRACTOR shall submit partial release of liens from all Subcontractors, suppliers, and laborers covering the preceding request.
- C. For the final pay request, the CONTRACTOR will be required to submit FINAL release of liens for ALL Subcontractors, suppliers, etc., and for ALL contract labor BEFORE FINAL PAYMENT WILL BE MADE.

APPLICATIONS FOR PAYMENT

01152-1

## PROJECT Nos. 12170 &amp; 12181

- D. No partial payments, after the first payment, will be made until all partial release of liens are submitted for the preceding month's billing, as described
- E. Each Application for Payment shall be consistent with previous applications and payments as certified by and paid for by CITY.
- F. Payment Application Forms: Use CITY Form "PERIODIC ESTIMATE FOR PARTIAL PAYMENT" as form for Applications for Payment.
  - 1. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of CONTRACTOR. CITY will return incomplete applications without action.
  - 2. Entries shall match data on the Schedule of Values and CONTRACTOR's Construction Schedule. Use updated schedules if revisions were made.
  - 3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
- G. Release of Lien: With each Application for Payment, submit release of lien from every entity who is lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
  - 1. Submit partial release of lien on each item for amount requested in previous application, after deduction for retainage, on each item.
  - 2. When an application shows completion of an item, submit final release of lien.
  - 3. CITY reserves the right to designate which entities involved in the Work must submit release of lien forms.
- H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
  - 1. List of subcontractors.
  - 2. Schedule of Values.
  - 3. CONTRACTOR's Construction Schedule (preliminary if not final).
  - 4. Products list.
  - 5. Submittals Schedule (preliminary if not final).
  - 6. List of CONTRACTOR's staff assignments.
  - 7. Copies of building permits.
  - 8. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
  - 9. Initial progress report.

## PROJECT Nos. 12170 &amp; 12181

- I. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
1. Evidence of completion of Project closeout requirements.
  2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
  3. Updated final statement, accounting for final changes to the Contract Sum.
  4. Evidence that claims have been settled if applicable.
  5. Final liquidated damages settlement statement.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

- END OF SECTION -



## PROJECT Nos. 12170 and 12181

## SECTION 01200 - PROJECT MEETINGS

## PART 1 GENERAL

## 1.01 REQUIREMENTS INCLUDED

- A. CITY's Representative shall schedule and administer progress as necessary.

City's Representative shall:

1. Distribute written notice of each meeting five (5) days in advance of meeting date.
2. Make physical arrangements for meetings.

- B. CONTRACTOR's Representative shall:

1. Prepare agenda for meetings.
2. Preside at meetings.
3. Record the minutes; include significant proceedings and decisions.
4. Reproduce and distribute copies of minutes within three days after each meeting.
  - a. To participants in the meeting.
  - b. To parties affected by decisions made at the meeting.

- C. Representative of CONTRACTOR, subcontractor and suppliers attending meetings shall be qualified and authorized to act on behalf of the entity each represents.

## 1.03 PRE-CONSTRUCTION MEETING

- A. Schedule after date of Notice to Proceed.

- B. Location: A central site, convenient for all parties, designated by CITY's Representative.

- C. Attendance:

1. The CONTRACTOR and its superintendent.
2. Representatives of the CITY.
3. Major subcontractors.
4. Major Suppliers.

- D. Suggested Agenda:

1. Distribution and discussion of:
  - a. Project Health and Safety Plan (HASP) and Activity Hazard Analysis (AHA)
  - b. List of major subcontractors and suppliers.
  - c. Projected Construction Schedules.

## PROJECT Nos. 12170 and 12181

- d. Shop drawings and other submittals.
- 2. Critical work sequencing.
- 3. Procurement of major equipment and materials requiring a long lead time.
- 4. Project Coordination
  - a. Designation of responsible personnel.
- 5. Procedures and processing of:
  - a. Field decisions.
  - b. Proposal requests.
  - c. Submittals.
  - d. Change Orders.
  - e. Applications for Payment
- 6. Adequacy of distribution of Contract Documents.
- 7. Use of premises:
- 8. Construction facilities, controls and construction aids.
- 9. Temporary utilities.
- 10. Safety procedures.
- 11. Security procedures.
- 12. Housekeeping procedures.

## 1.04 PROGRESS MEETINGS

- A. Schedule regular meetings as necessary on a day established by the CITY's Representative as required.
  - B. Hold called meetings as required by progress of the work.
  - C. Attendance
    - 1. CITY's Representative and CITY's professional consultants as needed.
    - 2. Subcontractors as active on the site.
    - 3. Suppliers as appropriate to the agenda.
  - D. Suggested Agenda:
    - 1. Meeting Minutes:
      - a. Review and Approval of Minutes of Previous Meeting
    - 2. Work Progress
      - a. Review of Work Progress Since Previous Meeting
      - b. Work to be Performed Next
    - 3. Review of Construction Schedule
- Award Date:  
NTP:

## PROJECT Nos. 12170 and 12181

Contract Completion Date:

Duration:

- a. Problems, which impeded Construction Schedule.
- b. Schedule Status [ ] Ahead [ ] Behind  
If behind schedule, action required to regain schedule
- c. Progress, Schedule during Succeeding Work Period
- d. Revisions to Construction Schedule
- e. Schedule Issues / Concerns

4. Review of Submittals Log
5. Review of RFI's log
6. Subcontractors and Deliveries:  
Sub-Contractors:
7. Safety Issues / Concerns:  
Reported Accidents:  
Lost Time Accidents:
8. Pending/Proposed Changes or Substitutions
  - a. Effect on construction schedule and on completion date
  - b. Effect on other contracts of the project
9. Quality Control  
Upcoming work items and inspections,  
any failed test and contractor's plan of action to correct them.
10. Field Observations, Concerns, Problems, Conflicts and Delays
11. Housekeeping
13. Action Items
14. Next Scheduled Meeting
15. Other:

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

- END OF SECTION -

## PROJECT NOs. 12170 &amp; 12181

## SECTION 01310 – PROGRESS SCHEDULES

PART 1 -- GENERAL

## 1.01 SCHEDULES

- A. Preliminary Progress Schedule: Submit within 7 calendar days after Notice to Proceed.
- B. Detailed Progress Schedule:
  - a. Submit initial Detailed Progress Schedule within 21 calendar days after Notice to Proceed.
  - b. Submit an Updated Progress Schedule at each meeting.

## 1.03 PRELIMINARY PROGRESS SCHEDULE

- A. Submit a detailed schedule, beginning with Notice to Proceed through Final Completion.
- B. Preliminary Progress Schedule will be resource / cost loaded to facilitate progress payments by the CITY. Cost loading will reflect cash flows and schedule of values.
- C. Update Preliminary Progress Schedule monthly; as part of progress payment process. Failure to do so may cause CITY to withhold all or part of the monthly progress payment until the Preliminary Progress Schedule is updated in a manner acceptable to CITY.

## 1.04 DETAILED PROGRESS SCHEDULE

- A. Submit Detailed Progress Schedule beginning with Notice to Proceed and continuing through Final Completion.
- B. Show the duration and sequences of activities required for complete performance of the Work reflecting means and methods chosen by CONTRACTOR.
- C. When accepted by CITY, Detailed Progress Schedule will replace Preliminary Progress Schedule and become Baseline Schedule. Subsequent revisions will be considered as Updated Progress Schedules.
- D. Update monthly to reflect actual progress and occurrences to date, including weather delays.

## 1.06 PROGRESS OF THE WORK

- A. Updated Progress Schedule shall reflect:
  - 1. Progress of Work to within 4 calendar days prior to submission.
  - 2. Approved changes in Work scope and activities modified since submission.
  - 3. Delays in Submittals or resubmittals, deliveries, or Work.

## PROGRESS SCHEDULES

## PROJECT NOs. 12170 &amp; 12181

4. Adjusted or modified sequences of Work.
  5. Other identifiable changes.
  6. Revised projections of progress and completion.
- B. Produce detailed subschedules during Project, upon request of CITY, to further define critical portions of the Work such as facility shutdowns.
  - C. Produce a highlighted 3 Week Look Ahead schedule for construction meetings on a weekly basis or as determined by the CITY with schedule information compiled from the latest DETAILED PROGRESS SCHEDULE update.
  - D. If CONTRACTOR fails to complete activity by its latest scheduled completion date and this failure is anticipated to extend Contract Times (or Milestones), CONTRACTOR shall, within 7 calendar days of such failure, submit a written statement as to how CONTRACTOR intends to correct nonperformance and return to acceptable current progress schedule. Actions by CONTRACTOR to complete the Work within Contract Times (or Milestones) will not be justification for adjustment to Contract Price or Contract Times.
  - E. CITY may order CONTRACTOR to increase plant, equipment, labor force or working hours if CONTRACTOR fails to:
    1. Complete a Milestone activity by its completion date.
    2. Satisfactorily execute Work as necessary to prevent delay to overall completion of Project, at no additional cost to CITY.
- 1.07 NARRATIVE PROGRESS REPORT
- A. Format:
    1. Organize same as Progress Schedule.
  - B. Contents:
    1. Number of calendar days and work days worked over the period, work force on hand, construction equipment on hand (including utility vehicles such as pickup trucks, maintenance vehicles, stake trucks).
    2. General progress of Work, including a listing of activities started and completed over the reporting period, mobilization/demobilization of subcontractors, and major milestones achieved.
    3. CONTRACTOR's plan for management of site (e.g., lay down and staging areas, construction traffic), utilization of construction equipment, buildup of trade labor, and identification of potential Contract changes.
    4. Identification of new activities and sequences as a result of executed Contract changes.

## PROJECT NOs. 12170 &amp; 12181

5. Documentation of weather conditions over the reporting period, and any resulting impacts to the work.
6. Description of actual or potential delays, including related causes, and the steps taken or anticipated to mitigate their impact.
7. In the case that actual or potential delays have been identified, the Narrative Progress report should be accompanied by a proposed work around schedule to mitigate potential and/or actual delays.
8. Changes to activity logic.
9. Changes to the work plan.
10. Identification of, and accompanying reason for, any activities added or deleted since the last report.
11. Steps taken to recover the schedule from CONTRACTOR-caused delays.

## 1.08 SCHEDULE ACCEPTANCE

- A. CITY's acceptance will demonstrate agreement that:
  1. Proposed schedule is accepted with respect to:
    - a. Contract Times, including Final Completion and all intermediate Milestones are within the specified times.
    - b. Specified Work sequences and constraints are shown as specified.
    - c. Specified CITY-furnished Equipment or Material arrival dates, or range of dates, are included.
    - d. Access restrictions are accurately reflected.
- B. Unacceptable Progress Schedule:
  1. Make requested corrections; resubmit within 4 calendar days.
- D. Narrative Report: All changes to activity duration and sequences, including addition or deletion of activities subsequent to CITY's acceptance of Baseline Progress Schedule, shall be delineated in Narrative Report current with proposed Updated Progress Schedule.

PART 2 – PRODUCTS (Not Applicable)PART 3 – EXECUTION (Not Applicable)

- END OF SECTION -

## PROJECT NOs. 12170 &amp; 12181

## SECTION 01340 - SUBMITTAL PROCEDURES

## PART 1 GENERAL

## 1.01 SUMMARY

- A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals. Submittals shall be electronic and shall retain the appearance of a hard copy submittal.

## 1.02 SUBMITTAL PROCEDURES

- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
  - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
  - 2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
    - a. City reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.
- C. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on CITY's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
  - 1. Initial Review: Allow 10 working days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. CITY will advise Contractor when a submittal being processed must be delayed for coordination.
  - 3. Resubmittal Review: Allow 10 working days for review of each resubmittal.
- D. Identification: Place a permanent label or title block on each submittal for identification.
  - 1. Indicate name of firm or entity that prepared each submittal on label or title block.
  - 2. Provide a space approximately 6 by 8 inches on label or beside title block to record Contractor's review and approval markings and action taken by City.
  - 3. Include the following information on label for processing and recording action taken:
    - a. Project name.

## SUBMITTAL PROCEDURES

01340-1

## PROJECT NOs. 12170 &amp; 12181

- b. Date.
  - c. Name and address of Contractor.
  - d. Name and address of subcontractor.
  - e. Name and address of supplier.
  - f. Name of manufacturer.
  - g. Submittal number or other unique identifier, including revision identifier.
    - 1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 06100.01.A).
  - h. Number and title of appropriate Specification Section.
  - i. Drawing number and detail references, as appropriate.
  - j. Location(s) where product is to be installed, as appropriate.
  - k. General Contractor's stamp of approval must be on all submittals, indicating that the Contractor has reviewed and approved prior to submitting to the City.
- E. Deviations: Highlight, encircle, or otherwise specifically identify deviations from the Contract Documents on submittals.
- F. Additional Copies: Unless additional copies are required for final submittal, and unless City observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.
- G. Transmittal: Package each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. City will return submittals, without review, received from sources other than Contractor.
1. Transmittal Form: Provide locations on form for the following information:
- a. Project name.
  - b. Date.
  - c. Destination (To:).
  - d. Source (From:).
  - e. Names of subcontractor, manufacturer, and supplier.
  - f. Category and type of submittal.
  - g. Submittal purpose and description.
  - h. Specification Section number and title.
  - i. Drawing number and detail references, as appropriate.
  - j. Transmittal number, numbered consecutively.
  - k. Remarks.
  - l. Signature of transmitter.
- H. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
1. Note date and content of previous submittal.
2. Note date and content of revision in label or title block and clearly indicate extent of revision.

## SUBMITTAL PROCEDURES

01340-2



## PROJECT NOS. 12170 &amp; 12181

3. Resubmit submittals until they are marked "Approved as submitted" or "Approved as noted".
- I. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, Fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- J. Use for Construction: Use only final submittals with mark indicating "Approved as submitted" or "Approved as noted" by City.

## PART 2 PRODUCTS

## 2.01 ACTION SUBMITTALS

- A. General: Prepare and submit Action Submittals required by individual Specification Sections.
- B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
  1. If information must be specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
  2. Mark each copy of each submittal to show which products and options are applicable.
  3. Include the following information, as applicable:
    - a. Manufacturer's written recommendations.
    - b. Manufacturer's product specifications.
    - c. Manufacturer's installation instructions.
    - d. Standard color charts.
    - e. Manufacturer's catalog cuts.
    - f. Wiring diagrams showing factory-installed wiring.
    - g. Printed performance curves.
    - h. Operational range diagrams.
    - i. Mill reports.
    - j. Standard product operation and maintenance manuals.
    - k. Compliance with specified referenced standards.
    - l. Testing by recognized testing agency.
    - m. Application of testing agency labels and seals.
    - n. Notation of coordination requirements.
  4. Submit Product Data before or concurrent with Samples.
  5. Number of Copies: Submit one copy of Product Data, unless otherwise indicated. City will return electronic copy. Retain electronic returned copy as a Project Record Document.

## SUBMITTAL PROCEDURES

01340-3

## PROJECT NOs. 12170 &amp; 12181

- C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.
1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
    - a. Dimensions.
    - b. Identification of products.
    - c. Fabrication and installation drawings.
    - d. Roughing-in and setting diagrams.
    - e. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
    - f. Shopwork manufacturing instructions.
    - g. Templates and patterns.
    - h. Schedules.
    - i. Design calculations.
    - j. Compliance with specified standards.
    - k. Notation of coordination requirements.
    - l. Notation of dimensions established by field measurement.
    - m. Relationship to adjoining construction clearly indicated.
    - n. Seal and signature of professional engineer if specified.
    - o. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.
  2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 24 by 36 inches.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
  2. Identification: Attach label on unexposed side of Samples that includes the following:
    - a. Generic description of Sample.
    - b. Product name and name of manufacturer.
    - c. Sample source.
    - d. Number and title of appropriate Specification Section.
  4. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.
    - a. Number of Samples: Submit two full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. City will return submittal with options selected.

## SUBMITTAL PROCEDURES

01340-4

## PROJECT NOs. 12170 &amp; 12181

5. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
  - a. Number of Samples: Submit three sets of Samples. City will retain two Sample sets; remainder will be returned. Mark up and retain one returned Sample set as a Project Record Sample.
    - 1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
    - 2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.
- E. Product Schedule or List: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
  1. Type of product. Include unique identifier for each product.
  2. Number and name of building.
  3. Location within building.
- F. Application for Payment: Comply with requirements specified in Division 01 Section "Applications for Payment."
- G. Schedule of Values: Comply with requirements specified in Division 01 Section "Applications for Payment."
- J. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design. Include the following information in tabular form:
  1. Name, address, and telephone number of entity performing subcontract or supplying products.

## 2.02 INFORMATIONAL SUBMITTALS

- A. General: Prepare and submit Informational Submittals required by other Specification Sections.
  1. Certificates and Certifications: Provide a notarized statement that includes signature of entity responsible for preparing certification. Certificates and

## SUBMITTAL PROCEDURES

01340-5

## PROJECT NOs. 12170 &amp; 12181

certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.

2. Test and Inspection Reports: Comply with requirements specified in Division 01 Section "Quality Requirements."
- B. Installer Certificates: Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- C. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- D. Material Certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- E. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- F. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- G. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, if any, and term of the coverage.
- H. Construction Photographs: Comply with requirements specified in Section 01040.

### PART 3 EXECUTION

#### 3.01 CONTRACTOR'S REVIEW

- A. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to City.
- B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

#### 3.02 CITY'S ACTION

- A. General: City will not review submittals that do not bear Contractor's approval stamp and will return them without action.

### SUBMITTAL PROCEDURES

01340-6

## PROJECT NOS. 12170 &amp; 12181

- B. Action Submittals: City will review each submittal, make marks to indicate corrections or modifications required, and return it. City will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken, as follows:
1. Approved as submitted
  2. Approved as noted
  3. Revise and resubmit
  4. Rejected.
- C. Informational Submittals: City will review each submittal and will not return it, or will return it if it does not comply with requirements. City will forward each submittal to appropriate party.
- D. Partial submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
- E. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

- END OF SECTION -

## PROJECT NOs 12170 &amp; 12181

## SECTION 01400 - QUALITY CONTROL

## PART 1 GENERAL

## 1.01 DEFINITION

- A. Specific quality control requirements for the WORK are indicated throughout the Contract Documents. The requirements of this Section are primarily related to performance of the WORK beyond furnishing of manufactured products. The term "Quality Control" includes inspection, sampling and testing, and associated requirements.

## 1.02 SAMPLING AND TESTING

- A. Unless otherwise indicated, all sampling and testing shall be in accordance with the methods prescribed in the current standards of the ASTM, as applicable to the class and nature of the article or materials considered; however, the CITY reserves the right to use any generally-accepted system of sampling and testing which, in the opinion of the CITY will ensure that the quality of the work is in full accord with the Contract Documents.
- B. Any waiver by the CITY of any specific testing or other quality assurance measures, whether or not such waiver is accompanied by a guarantee of substantial performance as a relief from the specified testing or other quality assurance requirements as originally specified, and whether or not such guarantee is accompanied by a performance bond to assure execution of any necessary corrective or remedial WORK, shall not be construed as a waiver of any requirements of the Contract Documents.
- B. Notwithstanding the existence of such waiver, the CITY reserves the right to make independent investigations and tests, and failure of any portion of the WORK to meet any of the requirements of the Contract Documents, shall be reasonable cause for the CITY to require the removal or correction and reconstruction of any such work in accordance with the General Conditions.

## PART 2 PRODUCTS (Not Applicable)

## PART 3 EXECUTION (Not Applicable)

- END OF SECTION -

## PROJECT NOS. 112170 &amp; 12181

## SECTION 01500 - CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 - GENERAL

## 1.1 REFERENCES

- A. The following is a list of standards which may be referenced in this Section:
1. NFPA, National Fire Prevention Standard for Safeguarding Building Construction Operations.
  2. Florida Department of Law Enforcement – Domestic Terrorism Task Force for Code Orange Conditions.

## 1.2 MOBILIZATION

- A. Mobilization shall include, but not be limited to, these principal items:
1. Obtaining required permits.
  2. Providing onsite sanitary facilities and potable water facilities as specified and as required by Laws and Regulations, and governing agencies.
  3. Arrange with the CITY a Contractor Staging Area. Arrange for size and location. Coordinate with the work of other contractors that are working on the site.
  4. Posting OSHA required notices and establishing safety programs and procedures.
  5. Have CONTRACTOR's superintendent at site full time.
  6. Post Project Sign.
- B. Available on-site staging, parking and material storage areas are limited.

## 1.3 PROTECTION OF WORK AND PROPERTY

- A. Comply with CITY's safety rules while on CITY's project.
- B. Keep CITY informed of serious onsite accidents and related claims.

PART 2 - PRODUCTS

## 2.1 PROJECT SIGN

- A. The Project Sign Template is shown in Section 01590, Project Sign.

01500

CONSTRUCTION FACILITIES  
AND TEMPORARY CONTROLS

## PROJECT NOS. 112170 &amp; 12181

- B. Install at the location directed by the CITY.
- C. Furnish and install one sign.

PART 3 - EXECUTION

## 3.1 TEMPORARY UTILITIES

- A. Power:
  - 1. Commercial electric power service is available from Florida Power and Light in the vicinity of the project site. CONTRACTOR shall determine type and amount required and shall make arrangements for obtaining temporary electric power service, metering equipment, and pay all costs for the temporary electric power used.
  - 2. Existing 120 volt, single phase power within the existing buildings (e.g., operations building, etc.) will be made available for the CONTRACTOR's use during construction at no cost to the CONTRACTOR. CITY approval is required prior to connection and use
- B. Lighting: Provide temporary lighting to meet all applicable safety requirements to allow erection, application, or installation of materials and equipment, and observation or inspection of the Work.
- C. Heating, Cooling, and Ventilating:
  - 1. Provide as required to maintain adequate environmental conditions to facilitate progress of the Work, to meet specified minimum conditions for installation of materials, and to protect materials, equipment, and finishes from damage due to temperature or humidity.
  - 2. Provide adequate forced air ventilation of enclosed areas to cure installed materials, to dispense humidity, and to prevent hazardous accumulations of dust, fumes, vapors, or gases.
  - 3. Pay all costs of installation, maintenance, operation, removal, and fuel consumed.
- D. Potable Water: The CONTRACTOR shall furnish chilled bottled drinking water or water furnished in other suitable dispensers for their construction personnel.
- E. Potable Water – Connection to Existing Water Supply: CONTRACTOR shall be allowed to connect to existing potable water supply at the treatment plants.

01500

CONSTRUCTION FACILITIES  
AND TEMPORARY CONTROLS



## PROJECT NOS. 112170 &amp; 12181

- F. Sanitary and Personnel Facilities: Provide and maintain facilities for CONTRACTOR's employees and subcontractors. Regularly service, clean, and maintain facilities and enclosures, as necessary
- G. Fire Protection: Furnish and maintain on site adequate firefighting equipment capable of extinguishing incipient fires. Comply with applicable parts of National Fire Prevention Standard for Safeguarding Building Construction Operations (NFPA No. 241).

## 3.2 PROTECTION OF WORK AND PROPERTY

## A. General:

- 1. Where completion of the Work requires temporary or permanent removal and/or relocation of existing utility, coordinate all activities with CITY of said utility and perform all work to their satisfaction.
- 2. Keep fire hydrants and water control valves free from obstruction and available for use at all times.
- 3. In areas where CONTRACTOR's operations are adjacent to or near a utility, such as gas, telephone, television, electric power, water, sewer, or irrigation system, and such operations may cause damage or inconvenience, suspend operations until arrangements necessary for protection have been made by CONTRACTOR.
- 4. Do not impair operation of existing utility systems. Prevent construction material, pavement, concrete, earth, volatile and corrosive wastes, and other debris from entering the operating water treatment plant filters.

## B. Site Security:

- 1. General – Code Yellow or Less:
  - a. Provide and maintain temporary security fences as necessary to protect the Work and CONTRACTOR furnished products not yet installed.
  - b. Secure sites include, but are not limited to, water treatment plants, wastewater treatment plants, wellfields, water booster pump stations, storage facilities, and master lift stations.
  - c. All employees shall have a company provided photo identification badge approved by the CITY to be worn at all times while on a secure project site.
  - d. Visitors shall be required to obtain daily visitor badges and vehicle access.
  - e. Obtain approval in writing from the CITY for work on secure sites outside of normal working hours. Approval must be available for inspection while working on the site after hours.

01500

CONSTRUCTION FACILITIES  
AND TEMPORARY CONTROLS

## PROJECT NOS. 112170 &amp; 12181

2. Code Orange Conditions for Work on Secure Sites:
  - a. The CONTRACTOR shall provide a list, to be updated weekly or whenever employees are added or removed, of all employees and subcontractor employees to be provided site access. Access for employees or visitors cannot be guaranteed and is subject to the discretion of security personnel.
  - b. All employees shall wear badges and sign-in daily.
  - c. The CONTRACTOR shall provide advance notice and coordinate with the CITY for screening and delivery of all materials and supplies, including FedEx, US Postal Service, UPS, and all general delivery items.
    - 1) All packages for water and wastewater treatment plant sites will be delivered through the central depot.
    - 2) All packages shall have the name of a CONTRACTOR's employee stationed at the jobsite.
    - 3) All delivery drivers shall have suitable photo identification and will be required to go through security procedures.
    - 4) No delay claims will be allowed for failure to obtain clearance for deliveries or to delays associated with the above processes.
3. Code Red Conditions:
  - a. Work on secure sites will be stopped for the duration of code red conditions. No access by CONTRACTOR or subcontractor personnel will be permitted until clearance has been granted by the CITY.
  - b. The CONTRACTOR will be compensated for standby delay under code red conditions as provided in Section 00826, SPECIAL CONDITIONS.

## 3.3 TEMPORARY CONTROLS

## A. Air Pollution Control:

1. Minimize air pollution from construction operations.
2. Burning will not be permitted on or adjacent to site.
3. Removal of demolition debris shall be conducted to minimize dust. Strictly adhere to applicable environmental regulations for dust prevention.

## 3.4 PARKING AREAS

- A. Control vehicular parking to preclude interference with parking, access by emergency vehicles, CITY's operations, or construction operations.
- B. Coordinate with the CITY to obtain a designated parking area for employees working on this project.

01500

CONSTRUCTION FACILITIES  
AND TEMPORARY CONTROLS

## PROJECT NOS. 112170 &amp; 12181

## 3.5 CLEANUP PROCEDURES FOR HURRICANE WARNINGS AND WATCHES

- A. In the event that the National Oceanographic and Atmospheric Administration (NOAA) issues a hurricane watch for the Fort Lauderdale area, the CITY will contact the CONTRACTOR informing him that the watch has been established. Once notified of a hurricane watch, the CONTRACTOR will remove all unnecessary items from the work area and tie down all remaining supplies, barricades, and movable (under 200 pounds) objects. The will determine "necessary" items. If a warning is issued, the CONTRACTOR shall complete the clean-up and evacuate the area the same day. The CITY shall not be liable for any costs or delays caused as a result of demobilization or remobilization due to the above.

## 3.6 CLEANING DURING CONSTRUCTION

- A. Jobsite shall be maintained in a neat and clean condition.
- B. Wet down exterior surfaces prior to sweeping to prevent blowing of dust and debris. At least weekly, sweep all floors affected by the work, and pick up all debris and dispose.
- C. Provide approved containers for collection and disposal of waste materials, debris, and rubbish. At least at weekly intervals, dispose of such waste materials, debris, and rubbish offsite.
- D. Thoroughly clean all spilled dirt, gravel, or other foreign material caused by the construction at the conclusion of each day's operation. Sidewalks, unless under construction, shall be kept clear of material, and available for pedestrian use at all times.

- END OF SECTION -

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CONSTRUCTION FACILITIES  
AND TEMPORARY CONTROLS

## PROJECT NOs 12170 &amp;12181

## SECTION 01505 - MOBILIZATION

## PART 1 GENERAL

## 1.01 GENERAL

- A. Mobilization shall include the obtaining of all permits; moving onto the site of all equipment; signage; construction facilities; and implementing security requirements; all as required for the proper performance and completion of the WORK. Mobilization shall include the following principal items:

1. Installing temporary construction power, wiring, and lighting facilities.
2. Developing construction water supply.
3. Providing all on-site communication facilities, including telephones and radio pagers.
4. Providing on-site sanitary facilities and potable water facilities.
5. Arranging for and erection of CONTRACTOR's work, site access, and storage.
6. Having all OSHA required notices and establishment of safety programs.
7. Having the CONTRACTOR's superintendent at the job site during construction.
8. Submittals.
9. Audio-Visual preconstruction record as described in Section 01010.
10. Project signs.

## PART 2 PRODUCTS (Not Applicable)

## PART 3 EXECUTION

## 3.01 PAYMENT FOR MOBILIZATION

- A. There is no separate payment for mobilization. Mobilization shall be included within the contractors bid price.

- END OF SECTION -

## PROJECT NOs 12170 &amp; 12181

## SECTION 01510 - TEMPORARY UTILITIES

## PART 1 GENERAL

## 1.01 GENERAL REQUIREMENTS

- A. Types: The types of utility services required for general temporary use at the project site include the following:

Water service (potable for certain uses)  
Storm sewer  
Sanitary sewer  
Electric power service  
Telephone service

- B. It shall be the CONTRACTOR's responsibility to provide equipment that is adequate for the performance of the WORK under this Contract within the time specified. All equipment shall be kept in satisfactory operating condition, shall be capable of safety and efficiently performing the required WORK, and shall be subject to inspection and approval by the OWNER's representative at any time within the duration of the Contract. All work hereunder shall conform to the applicable requirements of the OSHA Standards for Construction.

## 1.02 JOB CONDITIONS

- A. Scheduled Uses: The CONTRACTOR shall, in conjunction with establishment of job progress schedule, establish a schedule for implementation and termination of service for each temporary utility or facility; at earliest feasible time, and when acceptable to OWNER change over from use of temporary utility service to permanent service.

## PART 2 PRODUCTS (Not Applicable)

## PART 3 EXECUTION

## 3.01 INSTALLATION OF POWER DISTRIBUTION SYSTEM

- A. Power: The CONTRACTOR shall provide all necessary power required for its operations under the Contract, and shall provide and maintain all temporary power lines required to perform the WORK in a safe and satisfactory manner.

## 3.02 INSTALLATION OF LIGHTING

- A. Construction Lighting: All WORK conducted at night or under conditions of deficient daylight shall be suitable lighted to insure proper WORK and to afford adequate facilities for inspection and safe working conditions.

## PROJECT NOs 12170 &amp; 12181

## 3.03 WATER SUPPLY

- A. General: The CITY will furnish reasonable quantities of water required by the CONTRACTOR in performance of the WORK under the Contract; however, the CONTRACTOR shall provide all facilities necessary to convey the water from the OWNER-designated source to the points of use in accordance with the requirements of the Contract Document. The CONTRACTOR shall pay all permit and water charges.
- B. Potable Water: All drinking water on the site during construction shall be furnished by the CONTRACTOR and shall be bottled water or water furnished in acceptable metal dispensers. Notices shall be posted conspicuously throughout the site warning the CONTRACTOR's personnel that piped water may be contaminated.
- C. Water Connections: The CONTRACTOR shall not make connection to, or draw water from, any fire hydrant or pipeline without first obtaining permission of the authority having jurisdiction over the use of said fire hydrant or pipeline and from the agency owning the affected water system. For each such connection made, the CONTRACTOR shall first attach to the fire hydrant or pipeline a valve and a meter, if required by the said authority, of a size and type acceptable to said authority and agency. The CONTRACTOR shall pay all permit and water charges.
- D. Removal of Water Connections: Before final acceptance of the WORK on the project, all temporary connections and piping installed by the CONTRACTOR shall be entirely removed, and all affected improvements shall be restored to their original condition, or better, to the satisfaction of the C and to the agency owning the affected utility.

## 3.04 INSTALLATION OF SANITARY FACILITIES

- A. Toilet Facilities: Fixed or portable chemical toilets shall be provided wherever needed for the use of CONTRACTOR's employees. Toilets at construction job sites shall conform to the requirements of Subpart D, Section 1926.51 of the OSHA Standards for Construction.
- B. Sanitary and Other Organic Wastes: The CONTRACTOR shall establish a regular daily collection of all sanitary and organic wastes. All wastes and refuse from sanitary facilities provided by the CONTRACTOR or organic material wasted from any other source related to the CONTRACTOR's operations shall be disposed of away from the site in a manner satisfactory to the CITY and in accordance with all laws and regulations pertaining thereto.

## 3.05 INSTALLATION OF FIRE PROTECTION

- A. Fire Protection: The construction of the WORK shall be connected with the CONTRACTOR's water supply system and shall be adequately protected against damage by fire. Hose connections and hose, water casks, chemical equipment, or other sufficient means shall be provided for fighting fires in the temporary structures and other portions of the WORK, and responsible persons shall be designated and instructed in the operation

## PROJECT NOs 12170 &amp; 12181

such fire apparatus so as to prevent or minimize the hazard of fire. The CONTRACTOR's fire protection program shall conform to the requirements of Subpart F of the OSHA Standards for Construction.

## 3.06 MEASUREMENT AND PAYMENT

- A. There shall be no special measurement or payment for the work under this section, it shall be included in the contractor's bid price.

- END OF SECTION -

## PROJECT NOs. 12170 &amp; 12181

## SECTION 01520 – MAINTENANCE OF UTILITY OPERATIONS DURING CONSTRUCTION

PART 1 -- GENERAL

## 1.01 SUMMARY

- A. The existing plant will be maintained in continuous operation by the CITY during the entire construction period of the Contract as hereinafter specified. The intent of this Section is to outline the minimum requirements necessary to provide continuous treatment throughout the construction period.
- B. Work under the Contract shall be scheduled and conducted by the CONTRACTOR so as not to impede any treatment process except as explicitly permitted hereinafter. In performing the Work shown and specified, the CONTRACTOR shall plan and schedule his Work to meet the plant's daily and seasonal operating requirements, and the constraints and construction requirements as outlined in this Section.
- C. The work under the Contract to be performed by the CONTRACTOR may be adjacent to, or within, the work area(s) of other work concurrently in progress that is being performed by other contractors on site. Likewise the work under other Contracts may be adjacent to, or within, the work area(s) of the work under the Contract to be performed by the CONTRACTOR. The CONTRACTOR shall plan, coordinate and schedule his Work with all other contractors on site, to meet the constraints and construction requirements of other Contracts and also meet the plant's daily and seasonal operating requirements as outlined in this Section.

## 1.02 GENERAL CONSTRAINTS

- A. The CONTRACTOR shall schedule the Work so that the plant is maintained in continuous operation. All treatment processes shall be maintained in continuous operation during the construction period except during approved process interruptions. All short-term system or partial systems shutdowns shall be approved by the CITY. If in the judgment of the CITY, a requested shutdown is not required for the CONTRACTOR to perform the Work, the CONTRACTOR shall utilize approved alternative methods to accomplish the Work. All shutdowns shall be coordinated with and scheduled at times suitable to the CITY. Shutdowns shall not begin until all required materials are on hand and ready for installation. Each shutdown period shall commence at a time approved by the CITY, in writing.
- B. If the CONTRACTOR completes all required Work before the specified shutdown period has ended, the CITY may immediately place the existing system back into service.
- C. The CITY shall have the authority to order Work postponed, stopped or prohibited that would, in his opinion, unreasonably result in interrupting the necessary functions of the plant operations.
- D. If the CONTRACTOR impairs performance or operation of the plant as a result of not complying with specified provisions for maintaining plant operations, then the



## PROJECT NOs. 12170 &amp; 12181

CONTRACTOR shall immediately make all repairs or replacements and do all Work necessary to restore the plant to operation to the satisfaction of the CITY and the ENGINEER. Such Work shall progress continuously to completion on a 24-hours per day, seven Work days per week basis.

1.03 GENERAL OPERATING REQUIREMENTS, CONSTRAINTS, AND CONSTRUCTION REQUIREMENTS

A. Access to Plant Site, Roadways, and Parking Areas

1. An unobstructed traffic route through the facility shall be maintained at all times for the CITY's operations personnel and maintenance equipment. Parking for personal vehicles of construction personnel may park on CITY property within the facility where designated. The CONTRACTOR shall be responsible for providing access to and for preparing and maintaining approved parking areas.
2. Vehicular access to the treatment units and buildings for CITY personnel shall be maintained at all times by the CONTRACTOR.

- B. Personnel Access: Treatment plant personnel shall have access to all areas that remain in operation throughout the construction period. The CONTRACTOR shall locate stored material, dispose of construction debris and trash, provide temporary walkways, provide temporary lighting, and other such Work as directed by the CITY to maintain personnel access to areas in operation. Access and adequate parking areas for plant personnel must be maintained throughout construction.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

- END OF SECTION -

## PROJECT NOs 12170 &amp; 12181

## SECTION 01530 - PROTECTION OF EXISTING FACILITIES

## PART 1 GENERAL

## 1.01 EXISTING UTILITIES AND IMPROVEMENTS

- A. The CONTRACTOR shall protect all existing utilities and improvements not designated for removal and shall restore damaged or temporarily relocated utilities and improvements to a condition equal to or better than they were prior to such damage or temporary relocation, all in accordance with requirements of the Contract Documents.
- B. Where the proper completion of the WORK requires the temporary or permanent removal and/or relocation of an existing utility or other improvement which is indicated, the CONTRACTOR shall remove and, without unnecessary delay, temporarily replace or relocate such utility or improvement in a manner satisfactory to the CITY. In all cases of such temporary removal or relocation, restoration to former location shall be accomplished by the CONTRACTOR in a manner that will restore or replace the utility or improvement as nearly as possible to its former locations and to as good or better condition than found prior to removal.
- C. All costs of locating, repairing damage not due to failure of the CONTRACTOR to exercise reasonable care, and removing or relocating such utility facilities not shown in the Contract Documents with reasonable accuracy, and for equipment on the project which was actually working on that portion of the work which was interrupted or idled by removal or relocation of such utility facilities, and which was necessarily idled during such work will be paid for as extra work in accordance with the provisions of the General Conditions.
- D. Approval of Repairs: All repairs to a damaged utility or improvement are subject to inspection and approval by an authorized representative of the utility or improvement CITY before being concealed by backfill or other work.
- E. Maintaining in Service: All oil and gasoline pipelines, power, and telephone or the communication cable ducts, gas and water mains, irrigation lines, sewer lines, storm drain lines, poles, and overhead power and communication wires and cables encountered along the line of the WORK shall remain continuously in service during all the operations under the Contract, unless other arrangements satisfactory to the CITY are made. The CONTRACTOR shall be responsible for and shall repair all damage due to its operations,
- F. Remove debris from elevated portions of the building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
  - 1. Removal of deteriorated concrete protective coating, removal of deteriorated concrete and deteriorated reinforcing steel.
    - a. Hydro blasting or water jetting, The CONTRACTOR shall submit a detailed work plan to be approved by the CITY, describing the means to prevent any particles bigger than sand or grit from ending up in the treatment process.

## PROJECT NOs 12170 &amp; 12181

- b. Sandblasting, The CONTRACTOR shall submit a detailed work plan to be approved by the CITY operations, describing the means to contain any sandblasting debris that can turn into airborne and affect mechanical equipment in the surrounded areas.

## 1.04 SMOKING, SPARKS OR OPEN FLAME

## A. GENERAL

Smoking, any type of equipment, construction process or any other source that can produce sparks or flames near hazardous areas are not permitted.

## PART 2 PRODUCTS (Not Applicable)

## PART 3 EXECUTION

## 3.01 GENERAL

- A. Maintain barriers during entire construction period.
- B. Relocate barriers as required by progress of construction.

## 3.02 REMOVAL

- A. Completely remove barricades, including foundations, when construction has progressed to the point that they are no longer needed, and when approved by CITY's Representative.
- B. Clean and repair damage caused by installation, fill and grade areas of the site to required elevations and slopes, and clean the area.

## 3.04 MEASUREMENT AND PAYMENT

- A. There shall be no special measurement or payment for the work under this section; it shall be included in the price of all other work.

- END OF SECTION -

## PROJECT NOs 12170 &amp; 12181

## SECTION 01560 - TEMPORARY CONTROLS

## PART 1 GENERAL

## 1.01 SUMMARY

- A. Provide and maintain methods, equipment, and temporary construction, as necessary, to provide controls over environmental conditions at the construction site and related area under CONTRACTOR's control; remove physical evidence of temporary facilities at completion of work.

## 1.02 DUST CONTROL

- A. Provide positive methods and apply dust control materials to minimize raising dust from construction operations, and provide positive means to prevent air-borne dust from dispersing into the atmosphere.

## 1.03 WATER CONTROL

- A. Provide methods to control surface water to prevent damage to the project, the site, or adjoining properties.
  - 1. Control fill, grading and ditching to direct surface drainage away from excavations, pits, tunnels and other construction areas; and to direct drainage to proper runoff.
- B. Provide, operate and maintain hydraulic equipment of adequate capacity to control surface and water.
- C. Dispose of drainage water in a manner to prevent flooding, erosion, or other damage to any portion of the site or to adjoining areas.

## 1.04 DEBRIS CONTROL

- A. Maintain all areas under CONTRACTOR's control free of extraneous debris.
- B. Initiate and maintain a specific program to prevent accumulation of debris at construction site, storage and parking area, or along access roads and haul routes.
  - 1. Provide containers for deposit of debris.
  - 2. Prohibit overloading of trucks to prevent spillage on access and haul routes.
    - a. Provide periodic inspection of traffic areas to enforce requirements.
- C. Schedule periodic collections and disposal of debris.
  - 1. Provide additional collections and disposal of debris whenever the periodic schedule is to prevent accumulation.

## PROJECT NOs 12170 &amp; 12181

## 1.05 POLLUTION CONTROL

- A. Provide methods, means and facilities required to prevent contamination of soil, water or atmosphere by the discharge of noxious substances from construction operations.
- B. Provide equipment and personnel, perform emergency measures required to contain any spillage, and to remove contaminated soils or liquids.
  - 1. Excavate and dispose of any contaminated earth off-site and replace with suitable compacted fill and topsoil.
- C. Take special measures to prevent harmful substances from entering public waters.
  - 1. Prevent disposal of wastes, effluents, chemicals, or other such substances adjacent to streams or in sanitary or storm sewers.
- D. Provide systems for control of atmospheric pollutants.
  - 1. Prevent toxic concentrations of chemicals.
  - 2. Prevent harmful dispersal of pollutants into the atmosphere.

## PART 2 PRODUCTS (Not Applicable)

## PART 3 EXECUTION

## 3.01 MEASUREMENT AND PAYMENT

- A. There shall be no special measurement or payment for the work under this section; it shall be included in the price of all other work.

- END OF SECTION -

## PROJECT NOs 12170 &amp; 12181

## SECTION 01590 - PROJECT SIGN

## PART 1 GENERAL

Contractor, at contractor's expense, shall furnish and install a 4' x 8' sign (with white painted posts) prior to start of construction. A sample sign template is below but is not specific to the project. The sign shall be made to be weather resistant and on display for the entire length of contract. Shop drawings must be submitted prior to sign construction. The exact style and design of the sign will be provided by the CITY to the Contractor during the preconstruction meeting in PDF format.

**City of Fort Lauderdale**

## Keeping the Ocean in the Ocean

### Bringing Drier Streets to Hendricks Isle

**What's Happening?**  
The City of Fort Lauderdale is combating poor roadway drainage resulting from seasonal high tides and major rain events.  
[www.fortlauderdale.gov](http://www.fortlauderdale.gov)

**Benefits 5,000 Neighbors**

- Improved vehicular access during high tide and rain events
- Better drainage of roadway
- Enhanced neighborhood

**Phone**  
(954) 828-8000

**Cost**  
\$20,000

**Completion**  
August 2013

**Contractor**  
ABC Company

**We're Working On:**

- Installing interconnected underground catch basins
- Cleaning existing drainage pipes, including the outfall pipes
- Removing and replacing the concrete valley gutters that transport water to the catch basins
- Installing drainage valves to help alleviate flooding from high tides

**Fort Lauderdale City Commission**

John P. "Jack" Seiler Mayor	Bruce G. Roberts Vice Mayor, District I	Dean J. Trantalis Commissioner, District II	Bobby B. DuBose Commissioner, District III	Romney Rogers Commissioner, District IV	Lee R. Feldman, ICMA-CM City Manager
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The following items occurring after the "End of Section" are included in this section:

Appendix 01590-1 – Construction Sign Request Form.

END OF SECTION 01590

# Construction Sign Request Form

City of Fort Lauderdale

Bid 673-11973  
P12170 & P12181

Title (Bold):

Title (Not Bold):

What's Happening?

Benefits:

Number of Neighbors Benefitted:

Cost:

Month and Year of Expected Completion:

Contractor:

Phone: 954-828-8000

We're Working On:

Project Manager Signature

Date

Senior Project Manager Signature

Date

## PROJECT NOs 12170 &amp; 12181

## SECTION 01600 - MATERIAL AND EQUIPMENT

**PART 1 GENERAL****1.01 REQUIREMENTS INCLUDED**

- A. Material and equipment incorporated into the work:
1. Conform to applicable specifications and standards.
  2. Comply with size, make, type and quality specified, or as specifically approved in writing by the CITY's Representative.
  3. Manufactured and fabricated products:
    - a. Design, fabricate and assemble in accord with the best engineering and shop practices.
    - b. Two or more items of the same kind shall be identical, by the same manufacturer.
    - c. Products shall be suitable for service conditions.
    - d. Equipment capacities, sizes and dimensions shown or specified shall be adhered to unless variations are specifically approved in writing.
  4. Do not use material or equipment for any purpose other than that for which it is designed or is specified.

**1.02 MANUFACTURER'S INSTRUCTIONS**

- A. When Contract Documents require that installation of work shall comply with manufacturer's printed instructions, obtain and distribute copies of such instructions to parties involved in the installation, including two copies to CITY's Representative. Maintain one set of complete instructions at the job site during installation and until completion.
- B. Handle, install, connect, clean, condition and adjust products in strict accordance with such instructions and in conformity with specified requirements.
1. Should job conditions or specified requirements conflict with manufacturer's instructions, consult with CITY's Representative for further instructions.
  2. Do not proceed with work without clear instructions.
- C. Perform work in accord with manufacturer's instructions. Do not omit any preparatory step or installation procedure unless specifically modified or exempted by Contract Documents.



## PROJECT NOs 12170 &amp; 12181

## 1.03 TRANSPORTATION AND HANDLING

- A. Arrange deliveries of products in accordance with construction schedules, coordinate to avoid conflict with work and conditions at the site. Products shall be delivered to the job site on an "as needed" basis.
  - 1. Deliver products in undamaged condition, in manufacturers' original containers or packaging, with identifying labels intact with legible markings.
  - 2. Immediately upon delivery, inspect shipments to assure compliance with requirements of Contract Documents and approved submittals, and that products are properly protected and undamaged.
- B. Handle products to prevent soiling or damage to products or packaging.
- C. Coordinate deliveries to avoid conflict with Work and conditions at site:
  - 1. Work of other contractors, or CITY.
  - 2. Limitations of storage space.
  - 3. Availability of equipment and personnel for handling products.
  - 4. CITY's use of premises.
- D. Deliver products in undamaged condition in original containers or packaging, with identifying labels intact and legible.
- E. Partial deliveries of component parts of equipment shall be clearly marked to identify the equipment, to permit easy accumulation of parts and to facilitate assembly.
- F. Immediately on delivery, inspect shipment to assure:
  - 1. Product complies with requirements of Contract Documents and reviewed submittals.
  - 2. Quantities are correct.
  - 3. Containers and packages are intact, labels are legible.
  - 4. Products are properly protected and undamaged.
- G. Provide additional protection during handling as necessary to prevent scraping, marring or otherwise damaging products or surrounding surfaces.
- H. Handle products by methods to prevent bending or overstressing.

## PROJECT NOs 12170 &amp; 12181

## 1.04 STORAGE

- A. Store products in accordance with manufacturer's instructions, with seals and labels intact and legible.
  - 1. Store products subject to damage by the elements in weather-tight enclosures.
  - 2. Maintain temperature and humidity within the ranges required by manufacturer's instructions.
- B. Exterior Storage
  - 1. Provide substantial platforms, blocking or skids to support fabricating products above ground, prevent soiling or staining.
    - a. Cover products, subject to discoloration or deterioration from exposure to the elements, with impervious sheet coverings. Provide adequate ventilation to avoid condensation.
  - 2. Store loose granular materials on solid surface such as paved areas, or provide plywood or sheet materials to prevent mixing with foreign matter.
    - a. Provide surface drainage to prevent flow or ponding of rainwater.
    - b. Prevent mixing of refuse or chemically injurious materials or liquids.

## 1.05 PROTECTION AFTER INSTALLATION

- A. Provide protection of installed products to prevent damage from subsequent operations. Remove when no longer needed, prior to completion of work.
- C. Provide coverings to protect finished surfaces from damage.
  - 1. Cover projections, wall corners, and jambs, sills and soffits of openings, in areas used for traffic and for passage of products in subsequent work.
  - 2. Protect finished floors and stairs from dirt and damage.
    - a. In areas subject to foot traffic, secure heavy paper, sheet goods, or other materials in place.
    - b. For movement of heavy products, lay planking or similar materials in place.
    - c. Cover wall and floor surfaces in the vicinity of construction personnel activities and all finished surfaces used by construction personnel.
- D. Waterproofed surfaces
  - 1. Prohibit use of surfaces for traffic of any kind, and for storage of any products.

## PROJECT NOs 12170 &amp; 12181

2. When some activity must take place in order to carry out the Contract, obtain recommendations of installer for protection of surface.
    - a. Install recommended protection; remove on completion of that activity.
    - b. Restrict use of adjacent unprotected areas.
  - E. Lawns and landscaping
    1. Prohibit traffic of any kind across planted lawn and landscaped areas.
- 1.06 SUBSTITUTIONS AND PRODUCT OPTIONS
- A. Limitations on substitutions.
    1. During bidding period, Instructions to Bidders govern times for submitting requests for substitutions under requirements specified in this section.
    2. Substitutions will not be considered when indicated on shop drawings or product data submittals without separate formal request, when requested directly by Subcontractor or supplier, or when acceptance will require substantial revision of Contract Documents.
    3. Substitute products shall not be ordered or installed without written acceptance.
    4. Only one (1) request for substitution for each product will be considered. When substitution is not accepted, provide specified product.
  - B. Products List
    1. Within 15 days after Contract Date submit to CITY a complete list of major products proposed to be used, with the name of the manufacturer and the installing Subcontractor.
  - C. CONTRACTOR's Options
    1. For products specified only by reference standard, select any product meeting that standard.
    2. For products specified by naming several products or manufacturers, select any one of the products or manufacturers named or approved equal, which complies with the Specifications.
    3. For products specified by naming one or more products or manufacturers and "or approved equal," CONTRACTOR must submit a request as for substitutions for any product or manufacturer not specifically named.
  - D. Substitutions

## PROJECT NOs 12170 &amp; 12181

1. For a period of 15 days after Contract Date, CITY will consider written request from CONTRACTOR for substitution of products, unless otherwise noted.
2. Identify product by specification Section and Article Numbers. Provide manufacturer's name and address, trade name of product, and model or catalog number. List fabricators and suppliers as appropriate.
3. List similar projects using product, dates of installation, and names to CITY.
4. List availability of maintenance services and replacement materials.
5. Submit a separate request for each product, supported with complete data, with drawings and samples as appropriate, including:
  - a. Comparison of the qualities and performance of the proposed substitution with that specified.
  - b. Changes required in other elements of the work because of the substitution.
  - c. Effect on the construction schedule.
  - d. Cost data comparing the proposed substitution with the product specified.
  - e. Any required license fees or royalties.
  - f. Availability of maintenance services, and source of replacement materials.
6. The burden of proof as to the type, function, and quality of any such substitute material or equipment shall be upon the CONTRACTOR.
7. The CITY will be the sole judge as to the type, function, and quality of any such substitute material or equipment and the CITY's decision shall be final.
8. The CITY may require the CONTRACTOR to furnish at the CONTRACTOR's expense additional data about the proposed substitute.
9. The CITY may require the CONTRACTOR to furnish at the CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute.
10. Acceptance by the CITY of a substitute item proposed by the CONTRACTOR shall not relieve the CONTRACTOR of the responsibility for full compliance with the Contract Documents and for adequacy of the substitute item.
11. The CONTRACTOR shall be responsible for resultant changes and all additional costs which the accepted substitution requires in the CONTRACTOR work, the work of its Subcontractors and of other Contractors, and shall effect such changes without cost to the CITY.

## E. CONTRACTOR's Representation:

MATERIAL AND EQUIPMENT

01600-5

## PROJECT NOs 12170 &amp; 12181

1. A request for a substitution constitutes a representation that CONTRACTOR:
  - a. Has investigated the proposed product and determined that it is equal to or superior in all respects to that specified.
  - b. Will provide the same guarantees or bonds for the substitution as for the product specified.
  - c. Will coordinate the installation of an accepted substitution into the work, and make such other changes as may be required to make the work complete in all respects.
  - d. Waives all claims for additional costs, under CONTRACTOR's responsibility, which may subsequently become apparent.

## F. Submittal Procedures

1. Submit one request for substitution.
2. CITY will review requests for substitutions with reasonable promptness, and notify CONTRACTOR, in writing, of the decision to accept or reject the requested substitution.
3. During the bidding period, CITY will record acceptable substitutions in Addenda.
4. After award of Contract, CITY will notify CONTRACTOR, in writing, of decision to accept or reject requested substitutions in Addenda.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

- END OF SECTION -

## PROJECT NOs 12170 &amp; 12181

## SECTION 01700 - CONTRACT CLOSEOUT

## PART 1 GENERAL

## 1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

## 1.02 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:

1. Inspection procedures.
2. Warranties.
3. Final cleaning.

## 1.03 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.

1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
2. Submit list of all subcontractors including names, addresses (with zip code) and telephone numbers and dollar amount of work performed.
3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
4. Prepare and submit Project Record Documents, Final Completion construction photographs, damage or settlement surveys, property surveys, and similar final record information.
5. Complete final cleaning requirements, including touchup painting.
6. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

- B. Inspection: Upon notification by CONTRACTOR that the project is substantially complete, CITY will either proceed with inspection or notify Contractor of unfulfilled requirements. CITY will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional

## PROJECT NOs 12170 &amp; 12181

items identified by Engineer, that must be completed or corrected before certificate will be issued.

1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
2. Results of completed inspection will form the basis of requirements for Final Completion.

#### 1.04 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Preparation: Submit list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.

1. Organize list of spaces in sequential order.
2. Include the following information at the top of each page:
  - a. Project number.
  - b. Project name
  - c. Date.
  - d. Name of Contractor.
  - e. Page number.

#### 1.05 FINAL COMPLETION

- A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:

1. Submit a final Application for Payment according to Division 01 Section "Payment Procedures."
2. Submit final releases of lien from all subcontractors and suppliers
3. Submit pest-control final inspection report and warranty.

- B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Engineer will either proceed with inspection or notify Contractor of unfulfilled requirements. Final payment will only be made after ALL unconditional release of liens from all subcontractors and suppliers are received by the City.

1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.

#### 1.06 WARRANTIES

## PROJECT NOs 12170 &amp; 12181

- A. Submittal Time: Submit written warranties on request of Engineer for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
- B. Partial Occupancy: Submit properly executed warranties within 15 days of completion of designated portions of the Work that are completed and occupied or used by City during construction period by separate agreement with Contractor.

## PART 2 PRODUCTS

## 2.01 MATERIALS

- A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

## PART 3 EXECUTION

## 3.01 FINAL CLEANING

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
  - B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
    - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
    - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
    - c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
    - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
    - e. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
    - f. Sweep concrete floors broom clean.
    - g. Remove labels that are not permanent.



## PROJECT NOs 12170 &amp; 12181

- h. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
  - i. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
  - j. Leave Project clean and ready for occupancy.
- D. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on City's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

- END OF SECTION -

CONTRACT CLOSEOUT

01700-4

## PROJECT NOs 12170 &amp; 12181

## SECTION 01720 - PROJECT RECORD DOCUMENTS

## PART 1 GENERAL

## 1.01 SUMMARY

- A. This Section includes administrative and procedural requirements for Project Record Documents, including Record Product Data

## PART 2 PRODUCTS

## 2.01 RECORD DRAWINGS

1. Content: Types of items requiring marking include, but are not limited to, the following:
  - a. Changes made by Change Order or Work Change Directive.
  - b. Changes made following Engineer's written orders.
  - c. Field records for variable and concealed conditions.
2. Document all repairs via photographs. Photographs shall be marked with locations, time, date, and repair type. Photographs shall be numbered and numbers shall be marked on a location map. Submit photographs with pay applications to document repairs performed.
3. Mark important additional information that was either shown schematically or omitted from original Drawings.
4. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
5. Immediately before inspection for Certificate of Substantial Completion, review marked-up Record Prints with Engineer. Make corrections where required.

## 2.03 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
  1. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
  2. Note related Change Orders, Record Specifications, and Record Drawings where applicable.

## PART 3 EXECUTION

## 3.01 RECORDING AND MAINTENANCE

## PROJECT RECORD DOCUMENTS

01720-1

## PROJECT NOs 12170 &amp; 12181

- A. Recording: Maintain one copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur; do not wait until the end of Project.
- B. Maintenance of Record Documents and Samples: Store Record Documents and Samples apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for City's reference during normal working hours.
- C. Final pay request will not be processed until Record Documents have been completed and submitted to the City.

- END OF SECTION -

## PROJECT NOs 12170 &amp; 12181

## SECTION 02050 - DEMOLITION

## PART 1 - GENERAL

## 1.1 DEMOLITION, GENERAL

- A. General: Demolish indicated site improvements completely. Use methods required to complete the Work within limitations of governing regulations and as follows:
1. Do not use cutting torches until work area is cleared of flammable materials. Maintain portable fire-suppression devices during flame-cutting operations.
  2. Maintain fire watch during and for at least 4 hours after flame cutting operations.
  3. Maintain adequate ventilation when using cutting torches.
  4. Locate building demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
  5. Hoisting routes, stationary suspended loads, hooking, unhooking or guiding the load over or near by the cryogenic plant (LOX plant), hydrotreaters, aeration basin, lime silo, sulfuric acid, chlorine building, chlorine storage or any of the chemical storage tanks is not permitted.
  6. CONTRACTOR shall establish a work zone by establishing boundaries (using flags, range limit device or range control warning device, warning lines, railings or similar barriers) that are more than 20 feet from the hazardous areas and prohibiting the operator from operating the equipment past those boundaries.
  7. Smoking, any type of equipment, construction process or any other source that can produce sparks or flames nearby the cryogenic plant (LOX plant), hydrotreaters, aeration basin, lime silo, sulfuric acid, chlorine building, chlorine, treatment units at Fiveash, or nearby the chemical storage tanks are not permitted.
  8. Any demolition of ductwork must be replaced or restored to OWNER's approval at completion of job.
- B. Engineering Surveys: During demolition, perform surveys to detect hazards that may result from building demolition activities.
- C. Site Access and Temporary Controls: Conduct building demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
1. Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from CITY and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.
  2. Use water mist and other suitable methods to limit spread of dust and dirt. Comply with governing environmental-protection regulations. Do not use water when it may damage adjacent construction or create hazardous or objectionable conditions, such as ice, flooding, and pollution. Dust/dirt must not be allowed to enter any open water basins or flumes.

DEMOLITION

02050-1

## PROJECT NOs 12170 &amp; 12181

## D. Explosives: Use of explosives is not permitted.

1. Remove debris from elevated portions of the building by chute, hoist, or other device that will convey debris to grade level in a controlled descent. Hoisting routes, stationary suspended loads, hooking, unhooking or guiding the load over or near by the cryogenic plant (LOX plant), hydrotreaters, aeration basin, lime silo, sulfuric acid, chlorine building, chlorine storage or any of the chemical storage tanks is not permitted.

## 1.2 REPAIRS

- A. Promptly repair damage to adjacent buildings caused by demolition operations.

## 1.3 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove demolition waste materials from Project site [and legally dispose of them in an EPA-approved landfill acceptable to authorities having jurisdiction]. See Division 01 Section "Construction Waste Management and Disposal" for recycling and disposal of demolition waste.

1. Do not allow demolished materials to accumulate on-site.
2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

- B. Do not burn demolished materials.

## 1.4 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by building demolition operations. Return adjacent areas to condition existing before building demolition operations began.

1. Clean roadways of debris caused by debris transport.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

- END OF SECTION -

## PROJECT NOS 12170 &amp; 12181

## SECTION 02771 - CONCRETE CURBS AND SIDEWALKS

## PART 1 GENERAL

- 1.1 Products or materials touching water must meet NSF standards

## PART 2 PRODUCTS

## 2.1 EXPANSION JOINT FILLER

- A. 1/2-inch thick, preformed asphalt-impregnated, expansion joint material meeting AASHTO M153 Type I, II, or III, or AASHTO M213, or cellulose fiber types meeting the requirements of AASHTO M213, except the asphalt content is acceptable provided they contain minimum of 0.2 percent copper pentachlorophenate as a preservative and 1 percent water proofing wax.

## 2.2 CONCRETE

- A. Ready-mixed meeting ASTM C94, Option A, with compressive strength of 3,000 psi at 28 days.
- B. Maximum Aggregate Size: 1-1/2 inch.
- C. Slump: 2 to 4 inches.
- D. Any concrete that is expected to touch drinking water or raw water must be mixed with potable water.

## 2.3 CURING COMPOUND

- A. Liquid membrane-forming, clear or translucent, suitable for spray application and meeting ASTM C309, Type 1.

## PART 3 EXECUTION

## 3.1 FORMWORK

- A. Lumber Materials:
1. 2-inch dressed dimension lumber, or metal of equal strength, straight, free from defects that would impair appearance or structural quality of completed curb and sidewalk.
  2. 1-inch dressed lumber or plywood may be used where short-radius forms are required.
- B. Metals: Steel in new undamaged condition.
- C. Setting Forms:
1. Construct forms to shape, lines, grades, and dimensions.
  2. Stake securely in place.

## CONCRETE CURBS AND SIDEWALKS

02771-1

CAM #17-1080

Exhibit 3

Page 162 of 271

## PROJECT NOS 12170 &amp; 12181

## D. Bracing:

1. Brace forms to prevent change of shape or movement resulting from placement.
2. Construct short-radius curved forms to exact radius.

## E. Tolerances:

1. Do not vary tops of forms from gradeline more than 1/8 inch when checked with 10-foot straightedge.
2. Do not vary alignment of straight sections more than 1/8 inch in 10 feet.

## 3.2 PLACING CONCRETE

- A. Line locations must be conducted prior to excavation.
- B. Excavate to the required depth, place and compact limerock base. Limerock Base. Compact directly under the area and 1 foot beyond each side of the sidewalk and curb.
- C. Prior to placing concrete, remove water from excavation and debris and foreign material from forms.
- D. Place concrete as soon as possible, and within 1-1/2 hours after adding cement to mix without segregation or loss of ingredients, and without splashing.
- E. Place, process, finish, and cure concrete in accordance with applicable requirements of ACI 304, and this section. Wherever requirements differ, the more stringent shall govern.
- F. To compact, vibrate until concrete becomes uniformly plastic.
- G. All edges shall be smooth and rounded.

## 3.3 CURB CONSTRUCTION

- A. Construct ramps at pedestrian crossings.
- B. Expansion Joints: Place at maximum 20-foot intervals and at the beginning and end of curved portions of curb, and at connections to existing curbs. Install expansion joint filler at each joint.
- C. Curb Facing: Do not allow horizontal joints within 7 inches from top of curb.
- D. Contraction Joints:
  1. Maximum 10-foot intervals in curb.
  2. Provide open joint type by inserting thin, oiled steel sheet vertically in fresh concrete to force coarse aggregate away from joint.

## CONCRETE CURBS AND SIDEWALKS

02771-2

CAM #17-1080

Exhibit 3

Page 163 of 271

## PROJECT NOS 12170 &amp; 12181

3. Insert steel sheet to full depth of curb.
4. Remove steel sheet with sawing motion after initial set has occurred in concrete and prior to removing front curb form.
5. Finish top of curb with steel trowel and finish edges with steel edging tool.

## E. Front Face:

1. Remove front form and finish exposed surfaces when concrete has set sufficiently to support its own weight.
2. For formed face provide a broom finish.
3. Remove and replace defective concrete.
4. Apply curing compound to exposed surfaces of curb upon completion of finishing.
5. Continue curing for minimum of 5 days.

## F. Backfill curb with earth upon completion of curing period, but not before 7 days has elapsed since placing concrete.

1. Backfill shall be free from rocks 2 inches and larger and other foreign material.
2. Compact backfill firmly.

## 3.4 SIDEWALK CONSTRUCTION

## A. Thickness:

1. 6 inches in driveway and commercial areas.
2. 6 inches within the water treatment plants.

## B. Connection to Existing Sidewalk:

1. Remove old concrete back to an existing contraction joint.
2. Clean the surface.
3. Apply a neat cement paste immediately prior to placing new sidewalk.

## C. Expansion Joints: Place at maximum 20-foot intervals, at adjacent curb expansion joint, where sidewalk ends at curb, and around posts, poles, or other objects penetrating sidewalk. Install expansion joint filler at each joint.

## D. Contraction Joints:

1. Provide transversely to walks at locations opposite contraction joints in curb.
2. Dimensions: 3/16-inch by 1-inch weakened plane joints.
3. Construct straight and at right angles to surface of walk.

## E. Finish:

## CONCRETE CURBS AND SIDEWALKS

02771-3

CAM #17-1080

Exhibit 3

Page 164 of 271



## PROJECT NOS 12170 &amp; 12181

1. Broom surface with fine-hair broom at right angles to length of walk and tool at edges, joints, and markings.
2. Ensure that the surface variations are not more than 0.2% in any direction
3. Mark walks transversely at 5-foot intervals, with jointing tool; finish edges with rounded steel edging tool.
4. Apply curing compound to exposed surfaces upon completion of finishing.
5. Protect sidewalk from damage and allow to cure for at least 7 days.

- END OF SECTION -

## PROJECT NOs 12170 &amp; 12181

## SECTION 03100 - CONCRETE FORMWORK

## PART 1 - GENERAL

## 1.1 REFERENCE STANDARDS

- A. American Concrete Institute (ACI) Latest Edition:
  - 1. 301 Specifications for Structural Concrete for Buildings.
  - 2. 347 Recommended Practice for Concrete Formwork.
- B. American Society for Testing and Materials (ASTM):
  - 1. D1751 Pre-formed Expansion Joint Filler for Concrete Paving and Structural Construction (Non-extruding and Resilient Bituminous Types).
- C. Florida Building Code 2010 and amendments.

## 1.2 DELIVERY AND STORAGE

- A. Storage:
  - 1. Store new and reusable form lumber and form plywood under heavy waterproof coverings, or where well protected from inclement weather.
  - 2. Stack oiled form plywood on sticking to permit proper ventilation between uses.
  - 3. Store metal forms in such manner to prevent damage by denting, warping twisting and rusting.

## PART 2 - PRODUCTS

## 2.1 WOOD FORM MATERIALS

- A. Form Lumber: No. 2 Southern Pine or No. 2 Douglas Fir-Larch, S4S; true and straight members free from cupping, warping, loose knots, excessive checking and other structural defects.
- B. Form Plywood: Not less than 5/8-inch thick, exterior type, Class I, Grade "B-B", mill oiled and edge sealed.
  - 1. Concealed surfaces in Finished Work: Standard "B-B Plyform".

## 2.2 ACCESSORIES

- A. Expansion Joint Filler: ASTM D1751, pre-molded, asphalt impregnated cellulose fiber, thickness and depth indicated. For sealed joints use bond breaker such as polyethylene tape to prevent bleeding.
  - 1. The Burke Company "Fiber Expansion Joint".
  - 2. A. C. Horn, Inc. "Code 1390".
  - 3. W. R. Meadows, Inc. "SealTight Fibre Expansion Joint".
  - 4. Sonneborn "Sonoflex Cane".

## PROJECT NOs 12170 &amp; 12181

- B. Form Coating:
  - 1. Concealed from View: Form oil or release agent.
  - 2. Exposed to View: Non-staining, non-residue release agent with required warranty.
    - a. The Burke Company "Burke Release".
    - b. L & M Construction Chemicals "Debond".
    - c. Napco Construction Chemicals "Petkote".
    - d. Sonneborn "Cast-Off".
- C. Form Ties: Removable-type adjustable rod ties with minimum strength of 3000 pounds each that do not leave hole greater than 7/8-inch diameter, or snap-ties that break off not less than one-inch back of concrete surface.
  - 1. Provide ties with swaged washer or other acceptable device to prevent mortar leakage along tie.
- D. Moldings and Chamfer Strips: "C-Select" or "Finish" Southern Pine, straight, sound, and free of knots and other defects.
- E. Nails, Spikes, Lag Bolts, Through Bolts, Anchorages: Sized as required; of sufficient strength and character to maintain formwork in place while placing concrete.
- F. Shores: Tubular steel or wood forms capable of safely supporting vertical and lateral loads imposed by formwork, concrete and other construction loads and capable of preventing excessive deflection during concrete placing operations.

## PART 3 - EXECUTION

## 3.1 DESIGN

- A. General:
  - 1. Contractor is solely responsible for safety of formwork.
  - 2. Design formwork in compliance with ACI 301 and ACI 347, and to resist imposed loads and pressures.
  - 3. Conform to ACI 117 - Tolerances for Concrete Construction.
  - 4. Properly brace and tie forms together to maintain their position and shape during concrete placement.
  - 5. Minimize form joints.
  - 6. Camber formwork as required to take up settlement caused by concrete placing.
- B. Stripping: Arrange and assemble formwork to permit dismantling and stripping without damage to concrete. Design formwork to permit stripping without removal of principal shores where required.

## 3.2 EXAMINATION

- A. Forms to confine the concrete and shape it to the required lines shall be used wherever necessary. The CONTRACTOR shall assume full responsibility for the adequate design of all forms, and any forms which are unsafe or inadequate in any respect shall promptly be removed from the Work and replaced at the

## CONCRETE FORMWORK

03100-2

## PROJECT NOs 12170 &amp; 12181

CONTRACTOR's expense. A sufficient number of forms of each kind shall be provided to permit the required rate of progress to be maintained. The design and inspection of concrete forms and falsework, shall comply with applicable local, state and Federal regulations. Plumb and string lines shall be installed before concrete placement and shall be maintained during placement. Such lines shall be used by CONTRACTOR's personnel and by the ENGINEER and shall be in sufficient number and properly installed. During concrete placement, the CONTRACTOR shall continually monitor plumb and string line form positions and immediately correct deficiencies.

- B. Concrete forms shall be substantially, free from surface defects, and sufficiently tight to prevent leakage. Forms shall be properly braced or tied together to maintain their position and shape under a load of freshly-placed concrete.
- C. All forms shall be true in every respect to the required shape and size, shall conform to the established alignment and grade, and shall be of sufficient strength and rigidity to maintain their position and shape under the loads and operations incident to placing and vibrating the concrete. Suitable and effective means shall be provided on all forms for holding adjacent edges and ends of panels and sections tightly together and in accurate alignment so as to prevent the formation of ridges, fins, offsets, or similar surface defects in the finished concrete. Plywood, 5/8-inch and greater in thickness, may be fastened directly to studding if the studs are spaced close enough to prevent visible deflection marks in the concrete. The forms shall be tight so as to prevent the loss of water, cement and fines during placing and vibrating of the concrete. Specifically, the bottom of wall forms that rest on concrete footings or slabs shall be provided with a gasket to prevent loss of fines and paste during placement and vibration of concrete. Such gasket may be a 1 to 1-1/2 inch diameter polyethylene rod held in position to the underside of the wall form. Adequate clean-out holes shall be provided at the bottom of each lift of forms. The size, number, and location of such clean-outs shall be as acceptable to the ENGINEER.

### 3.3 FORM RELEASE AGENT

- A. Apply form release agent to form surfaces prior to placing reinforcing steel, anchoring devices, and embedded items per manufacturer's recommendations.
  - 1. Release agent required on form surfaces where concrete is exposed in finished work.
- B. Do not apply form release agent where concrete surfaces will receive special finishes and applied coverings that are affected by agent.
  - 1. Soak inside surfaces of untreated forms with clean water.
  - 2. Keep surfaces wet prior to placing concrete.

### 3.4 INSERTS, EMBEDDED ITEMS, OPENINGS AND ACCESSORIES

- A. Provide formed openings for pipes, conduits, sleeves, and other work embedded in and passing through concrete.

## PROJECT NOs 12170 &amp; 12181

- B. **Embedded Form Ties:** Holes left by the removal of form tie cones shall be reamed with suitable toothed reamers so as to leave the surface of the holes clean and rough before being filled with mortar as specified for "Finish of Concrete Surfaces" in Section entitled "Cast-in-Place Concrete." Wire ties for holding forms will not be permitted. No form-tying device or part thereof, other than metal, shall be left embedded in the concrete. Ties shall not be removed in such manner as to leave a hole extending through the interior of the concrete members. The use of snap-ties which cause spalling of the concrete upon form stripping or tie removal will not be permitted. If steel panel forms are used, rubber grommets shall be provided where the ties pass through the form in order to prevent loss of cement paste. Where metal rods extending through the concrete are used to support or to strengthen forms, the rods shall remain embedded and shall terminate not less than 1-inch back from the formed face or faces of the concrete.
- C.
1. Coordinate work of other Sections and cooperate with trades involved in forming and setting openings, slots, recesses, chases, sleeves, bolts, anchors and other inserts.
  2. Install anchor bolts in compliance with approved setting plans.
  3. Do not place concrete until work is accurately located and securely fastened into position.
- D. **Anchor Slots:** Install in concrete surfaces abutted by ends of masonry walls and in concrete surfaces faced with masonry. Set slots vertically, extending continuously to full height of adjacent masonry at centerlines of masonry wall ends and at 2'-0" on center in walls faced with masonry.
- E. **Chamfer Locations:** Exterior corners of beams, joints, columns, and where indicated in Drawings.
- F. **Joints:** Secure expansion joint filler in place as needed to prevent displacement when placing concrete. Bore holes through filler for rebar where required and hold down with removable spacer where sealant is to be applied. Apply polyethylene, foil, or other bond breaker tape where sealant is to be applied.

### 3.5 FORMWORK TOLERANCES

Unless otherwise indicated on drawings, formwork shall be constructed so that the concrete surfaces will conform to the tolerance limits listed in Table 3.1.

TABLE 3.1 - TOLERANCES FOR FORMED SURFACES

1. Variation from plumb:
  - A. In the lines and surfaces of columns, piers, walls, and in arises:
 

In any 10 ft of length-----	1/4 in.
Maximum for the entire length-----	1 in.

## PROJECT NOs 12170 &amp; 12181

- B. For exposed corner columns, control-joint grooves, and other conspicuous lines:  
 In any 20 ft length ----- 1/4 in.  
 Maximum for the entire length----- 1/2 in.
2. Variations from the level or from the grades specified in the contract documents:
- A. In slab soffits, ceilings, beam soffits and in arises, measured before removal of supporting shores:  
 In any 10 ft of length ----- 1/4 in.  
 In any bay or in 20 ft length ----- 3/8 in.
- B. In exposed lintels, sills, parapets, horizontal grooves, and other conspicuous lines:  
 In any bay or in 20 ft length ----- 1/4 in.  
 Maximum for the entire length----- 1/2 in.
3. Variation of the linear building lines from established position in plan and related position of columns, wall, and partitions:  
 In any bay ----- 1/2 in.  
 In any 20 ft of length ----- 1/2 in.  
 Maximum for the entire length----- 1 in.
4. Variation in the sizes and location of sleeves, floor openings, and wall openings -----  $\pm 1/4$  in.
5. Variation in cross-sectional dimensions of columns and beams and in the thickness of slabs and walls:  
 Minus ----- 1/4 in.  
 Plus ----- 1/2 in.
6. Footings\*
- A. Variations in dimensions in plan:  
 Minus ----- 1/2 in.  
 Plus ----- 2 in.
- B. Misplacement or eccentricity  
 2 percent of the footing width in the direction of misplacement but not more than----- 2 in.
- C. Thickness:

## PROJECT NOs 12170 &amp; 12181

Decrease in specified thickness ----- 5 percent

Increase in specific thickness ----- No limit

7. Variation in steps:

A. In a flight of stairs:

Rise -----  $\pm 1/8$  in.

Tread -----  $\pm 1/4$  in.

B. In consecutive steps:

Rise -----  $\pm 1/16$  in.

Tread -----  $\pm 1/8$  in.

\*Tolerances apply to concrete dimensions only, not to positioning of vertical reinforcing steel, dowels, or embedded items.

3.6 FIELD QUALITY CONTROL

- A. Inspect and check completed formwork, shoring, and bracing to ensure that work is in compliance with formwork design, and that supports, fastenings, wedges, ties, and parts are secure.
- B. Used form materials may be cleaned and reused if required finished surfaces can be produced.
  - 1. Use form with sheet metal patches over cracks and holes for concealed work only.

3.7 FORM REMOVAL

- A. Do not remove forms until concrete develops sufficient strength to sustain its own weight plus any superimposed loads, and in no case sooner than permitted by ACI 347.
- B. Remove forms in such sequence as to constantly insure structural adequacy.
- C. Remove form ties and projecting nails from concrete surfaces when forms are stripped.
- D. When forms are to be reused, withdraw nails, clean, patch holes and apply uniform coat of form release agent, or form oil, immediately after stripping, and store until reused.

- END OF SECTION -

## PROJECT NOs 12170 &amp; 12181

## SECTION 03200 - CONCRETE REINFORCEMENT

PART 1 -- GENERAL

## 1.1 SUMMARY

- A. The CONTRACTOR shall furnish, fabricate and place all concrete reinforcing steel, welded wire fabric, couplers, and concrete inserts for use in reinforced concrete and deformed reinforcing bars for masonry walls and shall perform all appurtenant work, including all the wires, clips, supports, chairs, spacers, and other accessories, all in accordance with the Contract Documents.

## 1.2 REFERENCE SPECIFICATIONS, CODES AND STANDARDS

- A. Without limiting the generality of other requirements of these specifications, all Work specified herein shall conform to or exceed the requirements of the Building Code and the applicable requirements of the following documents to the extent that the provisions of such documents are not in conflict with the requirements of this Section. All referenced specifications, codes, and standards refer to the most current issue available at the time of bid.

## 1. Codes and Standards

The Building Code, as referenced herein, is the Florida Building Code, latest edition.

## 2. Commercial Standards

ACI 315R Details and Detailing of Concrete Reinforcement.

CRSI Concrete Reinforcing Steel Institute Manual of Standard Practice

ACI 305R Hot Weather Concreting

ACI 318R Building Code Requirements for Reinforced Concrete.

ACI 350 Code Requirements for Environmental Engineering Concrete Structures

WRI Manual of Standard Practice for Welded Wire Fabric.

AWS DI.4 Structural Welding Code - Reinforcing Steel.

ASTM A 185-88 Specification for Welded Steel Wire Fabric for Concrete Reinforcement.

ASTM A 615-89 Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement.



## PROJECT NOs 12170 &amp; 12181

PART 2 -- PRODUCTS

## 2.1 REINFORCEMENT

- A. All reinforcing steel for all reinforced concrete construction shall conform to the following requirements:
  - 1. Bar reinforcement shall conform to the requirements of ASTM A 615 for Grade 60.
  - 2. Welded wire fabric reinforcement shall conform to the requirements of ASTM A 185 and the details.

## 2.2 ACCESSORY MATERIALS

- A. Bolsters, chairs, spacers and other devices for supporting and fastening reinforcing in place shall be galvanized wire type complying with CRSI recommendations on grade with gray plastic tipped legs.

## 2.3 MINIMUM REINFORCEMENT

- B. Minimum reinforcement shall be 0.33 percent of the cross sectional area along each face of the concrete member.

## PART 3 -- EXECUTION

## 3.1 TEMPERATURE REINFORCEMENT

- A. The minimum cross sectional area of horizontal and vertical reinforcing steel in walls shall be 0.0033 times the gross concrete area and the minimum cross sectional area of steel perpendicular to the principal steel in slabs shall be 0.0020 times the gross concrete area. Temperature steel shall not be spaced further apart than five times the slab or wall thickness, nor more than 18 inches.

## 3.2 PLACEMENT

- A. Reinforcing steel shall be accurately positioned, and shall be supported and wired together to prevent displacement, using annealed iron wire ties or suitable clips at intersections. All reinforcing steel shall be supported by concrete, plastic or metal supports, spacers or metal hangers which are strong and rigid enough to prevent any displacement of the reinforcing steel. For concrete over formwork, the CONTRACTOR shall furnish concrete, metal, plastic, or other acceptable bar chairs and spacers.
- B. Tie wires shall be bent away from the forms in order to provide the specified concrete coverage.
- C. Bars additional to those shown on the Drawings which may be found necessary or desirable by the CONTRACTOR for the purpose of securing reinforcement in position shall be provided by the CONTRACTOR at its own expense.

## PROJECT NOs 12170 &amp; 12181

- D. Unless otherwise specified, reinforcement placing tolerances shall be within the limits specified in Section 7.5 of ACI 318 except where in conflict with the requirements of the Building Code.
- E. Bars may be moved as necessary to avoid interference with other reinforcing steel, conduits, or embedded items. If bars are moved more than one bar diameter, or enough to exceed the above tolerances, the resulting arrangement of bars shall be as acceptable to the ENGINEER.
- F. Welded wire fabric reinforcement placed over horizontal forms shall be supported on slab bolsters having gray, plastic-coated standard type legs as specified in 2.02B herein. Slab bolsters shall be spaced not less than 30 inches on centers, shall extend continuously across the entire width of the reinforcing mat, and shall support the reinforcing mat in the plane shown on the Drawings.
- G. Welded wire fabric placed over the ground shall be supported on wired concrete blocks (dobies) spaced not more than 3 feet on centers in any direction. The construction practice of placing welded wire fabric on the ground and hooking into place in the freshly placed concrete shall not be used.
- H. The clear distance between parallel bars (except in columns and between multiple layers of bars in beams) shall be not less than the nominal diameter of the bars nor less than 1-1/3 times the maximum size of the coarse aggregate, nor less than one inch.
- I. Where reinforcement in beams or girders is placed in two or more layers, the clear distance between layers shall be not less than one inch.
- J. In columns, the clear distance between longitudinal bars shall be not less than 1-1/2 times the bar diameter, nor less than 1-1/2 times the maximum size of the coarse aggregate, nor less than 1-1/2 inches.
- K. The clear distance between bars shall also apply to the distance between a contact splice and adjacent splices or bars.
- L. Reinforcing bar splices shall only be used at locations shown on the Drawings. When it is necessary to splice reinforcement at points other than where shown, the character of the splice shall be as acceptable to the ENGINEER.
- M. The length of lap for reinforcing bars, unless otherwise shown on the Drawings shall be in accordance with ACI 350, Section 2.7 and ACI 318, Section 12.15.1 for a class B splice.
- N. Laps of welded wire fabric shall be in accordance with the ACI 318. Adjoining sheets shall be securely tied together with No. 14 tie wire, one tie for each 2 running feet. Wires shall be staggered and tied in such a manner that they cannot slip.

- END OF SECTION -

## PROJECT NOs 12170 &amp;12181

## SECTION 03315 - GROUT

PART 1 -- GENERAL

## 1.1 SUMMARY

- A. The CONTRACTOR shall furnish all materials for grout in accordance with the provisions of this Section and shall form, mix place, cure, repair, finish, and do all other Work as required to produce finished grout, all in accordance with the requirements of the Contract Documents.

## 1.2 SUBMITTALS

- A. The CONTRACTOR shall submit certified test results verifying the compressive strength, shrinkage, and expansion requirements specified herein; and manufacturer's literature containing instructions and recommendations on the mixing, handling, placement and appropriate uses for each type of grout used in the work.

PART 2 -- PRODUCTS

## 2.1 PREPACKAGED NON-SHRINK NON-METALLIC CEMENTITIOUS GROUT

- A. Nonshrink grout shall be a prepackaged, inorganic, non-gas liberating, nonmetallic, cement-based grout requiring only the addition of water. Manufacturer's instructions shall be printed on each bag or other container in which the materials are packaged. The specific formulation for each class of nonshrink grout specified herein shall be that recommended by the manufacturer for the particular application.
- B. Nonshrink grouts shall have a minimum 28 day compressive strength of 5000 psi (ASTM C109, restrained), shall have no shrinkage (0.0 percent) and a maximum 4.0 percent expansion in the plastic state when tested in accordance with ASTM C 827, and shall have no shrinkage (0.0 percent) and a maximum of 0.2 percent expansion in the hardened state when tested in accordance with CRD C 621.
- C. Cement based grout shall be Sika Grout 212 as manufactured Sika Corporation, or approved equal.
- D. Cementitious non-shrink grout shall be used at locations where there are no dynamic loads and the grout will not come in contact with wastewater or wastewater gases. Applications include, but are not limited to, structural steel column base plates, gate frames and guides, and precast concrete to cast-in-place concrete joints.
- E. All grout in contact with, above or nearby potable water treatment processes must be NSF compliant.

## 2.2 PREPACKAGED NON-SHRINK EPOXY GROUT

- A. Epoxy-based non-shrink grout shall be a three component, 100 percent solids, solvent-free system designed for machinery grouting. Applications include, but are not limited to, anchoring, pump and motor bases, and any other equipment imparting dynamic loads to the support system.

## PROJECT NOs 12170 &amp;12181

- B. When non-shrink grout is identified on the Drawings in submerged (water or wastewater) or under wastewater gas environment, epoxy-based non-shrink grouts shall be used.
- C. The epoxy grout shall be delivered to site as prepackaged, three-component systems composing of the resin, hardener, and specially blended aggregates. The components shall be stored as recommended by the manufacturer until use.
- D. All grout in contact with, above or nearby potable water treatment processes must be NSF compliant.

## 2.3 CURING MATERIALS

- A. Curing materials for prepackaged grout shall be as recommended by the manufacturer. Cement grouts shall be cured with water for a minimum of seven days.

## 2.4 CONSISTENCY

- A. The consistency of grouts shall be that necessary to completely fill the space to be grouted for the particular application. Dry pack consistency is such that the grout is plastic and moldable but will not flow. Where "dry pack" is called for in the Contract Documents, it shall mean a grout of the above described consistency; the type of grout to be used shall be as specified herein for the particular application.

## 2.5 MEASUREMENT OF INGREDIENTS

- A. Prepackaged grouts shall have ingredients measured by means recommended by the manufacturer.

PART 3 -- EXECUTION

## 3.1 GENERAL

- A. All mixing, surface preparation, handling, placing, consolidation, and other means of execution for prepackaged grouts shall be done according to the instructions and recommendations of the manufacturer.
- B. Cementitious grouts may be dry packed, poured in, vibrated or pumped into place as recommended by the manufacturer. Epoxy grouts shall only be poured in.
- C. Forms shall be used to place epoxy grout. Surfaces to be in contact with epoxy grout shall be prepared in accordance with the manufacturer's instructions. Steel plates in contact with grout shall receive a commercial blast to SSPC-SP6.
- D. Aggregate content of the epoxy grout shall not be altered without the concurrence of the manufacturer and the CITY.

## 3.2 CONSOLIDATION

- A. Grout shall be placed in such a manner, for the consistency necessary for each application, so as to assure that the space to be grouted is completely filled.

- END OF SECTION -

GROUT

## PROJECT NOS. 12170 &amp; 12181

## SECTION 03350 - CONCRETE FINISHES

PART 1 -- GENERAL

## 1.1 SUMMARY

- A. Furnish all materials, labor, and equipment required to provide finishes of all concrete surfaces specified herein and shown on the Drawings.

## 1.2 REFERENCE SPECIFICATIONS, CODES AND STANDARDS

- A. Without limiting the generality of the other requirements of the specifications, all work herein shall conform to the applicable requirements of the following documents. All referenced specifications, codes, and standards refer to the most current issue available at the time of Bid.
  - 1. ACI 301 - Specifications for Structural Concrete for Buildings
  - 2. ACI 318 - Building Code Requirements for Reinforced Concrete

PART 2 -- PRODUCTS (Not Applicable)PART 3 -- EXECUTION

## 3.01 FINISHES ON FORMED CONCRETE SURFACES

- A. Unless the details specify otherwise, all surfaces shall receive at least a Type I finish. The CITY shall be the sole judge of acceptability of all concrete finish work.
  - 1. Type I - Rough: All fins, burrs and other projections left by the forms shall be removed. All holes left by removal of ends of ties, and all other holes, depressions, or voids shall be filled solid with cement grout after first being thoroughly wetted. Honeycombs shall be chipped back to solid concrete as directed, prior to patching with cement grout. Holes shall be filled with a small tool that will permit packing the hole solidly with cement grout. Cement grout shall consist of one part cement to three parts sand, and the amount of mixing water shall be as little as consistent with the requirements of handling and placing. Color of cement grout shall match the adjacent wall surface.
  - 2. Type II - Grout Cleaned: Where this finish is required, it shall be applied after completion of Type I finish. After the concrete has been predampened, a slurry consisting of one part cement (including an appropriate quantity of white cement in order to produce a color matching the surrounding concrete) and 1-1/2 parts sand passing the No. 16 sieve, by damp loose volume, shall be spread over the surface. Any surplus shall be removed. The finish shall be kept damp for at least 36 hours after application.
  - 3. Type III - Smooth Rubbed: Where this finish is required, it shall be applied after the completion of the Type I finish. No rubbing shall be done before the concrete is

## PROJECT NOS. 12170 &amp; 12181

thoroughly hardened and the mortar used for patching is firmly set. A smooth, uniform surface shall be obtained. Unless the nature of the irregularities require it, the general surface of the concrete shall not be cut into. Corners and edges shall be slightly rounded. Brush finishing or painting with grout or neat cement will not be permitted.

4. All work performed on flumes or similar areas that transports or processes water utilized in the potable water process must have a smooth finish to minimize the accumulation of debris or bio-growth.

### 3.02 SLAB AND FLOOR FINISHES

- A. Slabs and floors shall be Broom finished to match existing surfaces.

### 3.03 SEALING OF CONCRETE FLOOR

- A. After installation of all equipment and piping, and after completion of other related construction activities, all floor slabs which are to remain unpainted and not intended to be immersed shall be sealed with a floor sealer unless stated otherwise. Painting and sealing shall not be performed in areas where the surface touches finished water or raw water. Remove all dirt, droppage, oil, grease, asphalt or other foreign matter with caustics and detergents as required prior to application. Sealer shall be applied in accordance with the manufacturer's recommendations.

### 3.04 FINISHES ON EQUIPMENT PADS

- A. Formed surfaces of equipment pads shall receive a Type I finish.
- B. Top surfaces of equipment pads, except those surfaces subsequently required to receive non-shrink grout and support equipment bases shall be steel troweled. Surfaces which will later receive non-shrink grout shall, before the concrete takes its final set, be made rough by removing the sand and cement that accumulates on the top to the extent that the aggregate will be exposed with irregular indentations in the surface up to 1/2 inch deep.

- END OF SECTION -

## TREATMENT PLANT CONCRETE REPAIR

PROJECT NOs 12170 &amp; 12181

## SECTION 03370 - CONCRETE CURING

PART 1 -- GENERAL

## 1.1 SUMMARY

- A. Protect all freshly deposited concrete from premature drying and excessively hot or cold temperatures, and maintain with minimal moisture loss at a relatively constant temperature for the period of time necessary for the hydration of the cement and proper hardening of the concrete in accordance with requirements specified herein.

## 1.2 REFERENCE SPECIFICATIONS, CODES AND STANDARDS

- A. Without limiting the generality of other requirements of these specifications all work hereunder shall conform to the applicable requirements of the referenced portions of the following documents, to the extent that the requirements therein are not in conflict with the provisions of this Section.
  - 1. Specifications for Structural Concrete for buildings, ACI 301.
  - 2. Guide for Measuring, Mixing, Transporting, and Placing Concrete, ACI 304.
  - 3. Hot Weather Concreting, ACI 305.
  - 4. Specifications for Sheet Materials for Curing Concrete, ASTM C171.
  - 5. Specification for Liquid Membrane - Forming Compounds for Curing Concrete, ASTM C309.

## 1.3 QUALITY ASSURANCE

- A. Curing compound shall not be used on any surface where concrete or other material will be bonded unless the manufacturer certifies that the curing compound will not prevent bond or indicates measures to be taken to completely remove the curing compound from areas to receive bonded applications.
- B. Care shall be taken to ensure that curing compounds are compatible with all finish concrete castings.

PART 2 -- PRODUCTS

## 2.1 CURING COMPOUNDS

- A. All materials shall meet the ASTM specifications C309, Type 1-D or Federal Specification TT-C-800 and shall have a minimum solids content of 30 percent.

PART 3 -- EXECUTION

## CONCRETE CURING

## TREATMENT PLANT CONCRETE REPAIR

PROJECT NOs 12170 &amp; 12181

## 3.1 PROTECTION AND CURING

- A. All concrete work shall be protected from the elements, flowing water and from defacement of any nature during construction operations.
- B. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury. Protect concrete during the curing period such that the concrete temperature does not fall below the requirements of Section 3.02 - Concrete Temperature. Cure concrete in accordance with paragraph E or paragraph F.
- C. When concrete is placed in cold weather as defined in ACI 306, the concrete shall be protected in accordance with requirements of ACI 306, Cold Weather Concreting.
- D. When concrete is placed in hot weather as defined in ACI 305, the concrete shall be protected in accordance with the requirements of ACI 305, Hot Weather Concreting.
- E. After placing and finishing, use one or more of the following methods to preserve moisture in concrete:
  - 1. Ponding or continuous fogging or sprinkling.
  - 2. Application of mats or fabric kept continuously wet.
  - 3. Continuous application of steam (under 150 degrees Fahrenheit).
  - 4. Application of sheet materials conforming to ASTM C171.
  - 5. Application of a curing compound conforming to ASTM C309. Apply the compound in accordance with the manufacturer's recommendation after water sheen has disappeared from the concrete surface and after finishing operations. For rough surfaces, apply in two directions at right angles to each other.
- F. Keep absorbent forms wet until they are removed. After form removal, cure concrete by one of the methods in paragraph E. Frames may be "cracked" within twenty-four hours and kept moist until they are required to be kept in place per Section 03100.

## 3.2 CONCRETE TEMPERATURE

- A. When the average of the highest and lowest temperature during the period from midnight to midnight is expected to drop below 40 F for more than three successive days, concrete shall be delivered to meet the following minimum temperature immediately after placement:
  - 1. 55 degrees Fahrenheit for sections less than 12 in. in the least dimension
  - 2. 50 degrees Fahrenheit for sections 12 in. to 36 in. in the least dimension
  - 3. 45 degrees Fahrenheit for sections 36 in. to 72 in. in the least dimension
  - 4. 40 degrees Fahrenheit for sections greater than 72 in. in the least dimension

## CONCRETE CURING



## TREATMENT PLANT CONCRETE REPAIR

PROJECT NOs 12170 &amp; 12181

- B. The temperature of concrete as placed shall not exceed these values by more than 20 degrees Fahrenheit.
- C. These minimum requirements may be terminated when temperatures above 50 degrees Fahrenheit occur during more than half of any 24 hour duration.
- D. Unless otherwise specified or permitted, the temperature of concrete as delivered shall not exceed 90 degrees Fahrenheit.
- E. During and following curing, do not allow the surface of the concrete to change temperature more than the following:
  - 1. 50 degrees Fahrenheit in any 24-hr period for sections less than 12 in. in the least dimension
  - 2. 40 degrees Fahrenheit for sections from 12 to 36 in. in the least dimension
  - 3. 30 degrees Fahrenheit for sections 36 to 72 in. in the least dimension
  - 4. 20 degrees Fahrenheit for sections greater than 72 in. in the least dimension

## 3.3 FINAL CURING

- A. Cure for at least the first seven days after placement for all concrete except high early strength concrete, for which the period shall be at least the first three days after placement.
  - 1. Alternatively, moisture retention measures may be terminated when:
    - a. Tests are made on at least two additional cylinders kept adjacent to the structure and cured by the same methods as the structure and tests indicate 70 percent of the specified compressive strength, f'c, as determined in accordance with ASTM C39.
    - b. The temperature of the concrete is maintained at 50 degrees Fahrenheit or higher for the time required to achieve 85 percent of f'c in laboratory-cured cylinders representative of the concrete in place.
    - c. The strength of concrete reaches f'c as determined by accepted nondestructive methods or laboratory-cured cylinder test results.
- B. When one of the curing procedures in Paragraph 3.01-E is used initially, the curing procedure may be replaced by one of the other procedures when concrete is one day old, provided concrete is not permitted to become surface dry at any time.

- END OF SECTION -

## CONCRETE CURING

## PROJECT NOs 12170 &amp;12181

## SECTION 03730 - CONCRETE REHABILITATION

## PART 1 - GENERAL

## 1.1 DESCRIPTION

## A. Coordination:

1. Coordinate abrasive blasting of substrates to avoid later difficulty or delay in performing the Work of this Section.
2. Remove all chemicals, films, laitance, sealing compounds and other materials from substrates to receive the Work of this Section, as may be required at no additional expense to the City of Fort Lauderdale.
3. All substrate surface preparation to be completed by manufacturers approved Applicator.
4. Dust or particles shall not fall on open basins or flumes.

## 1.2 PRODUCT DELIVERY, STORAGE AND HANDLING

## A. Delivery of Materials:

1. Deliver material in manufacturer's original unopened and undamaged packages.
2. Clearly identify manufacturer, brand name, contents, color stock number, and order number on each package.
3. Packages showing indications of damage that may affect condition of contents are not acceptable.

## B. Storage of Materials

1. Store in original packaging under protective cover and protect from damage.
2. Stack containers in accordance with manufacturer's recommendations.
3. Store all containers, including fillers, at temperatures recommended by the manufacturer.

## C. Handling of Materials: Handle materials in such a manner as to prevent damage to the materials and also to surrounding structures and equipment.

## 1.3 JOB CONDITIONS

- A. Environmental Requirements: Maintain proper substrate and air temperature before, during and after installation as required by Manufacturer and detailed in Manufacturer's technical data sheets and installation instructions or in writing from the Manufacturer. Provide adequate ventilation during application and curing periods.

## 1.4 WARRANTY

- A. Manufacturer of repair materials shall warranty its products as free from material defects for a minimum period of five (5) years. Provide associated Warranty Certificate.

## CONCRETE REHABILITATION

03730-1

## PROJECT NOs 12170 &amp;12181

- B. CONTRACTOR shall warranty the repairs as free from material and workmanship defects for a minimum period of five (5) years.

## PART 2 - MATERIALS (Not Applicable)

## PART 3 - EXECUTION

## 3.1 INSPECTION

- A. CONTRACTOR/Applicator shall examine the areas and conditions under which Work is to be performed and notify CITY OF FORT LAUDERDALE in writing of conditions detrimental to the proper and timely completion of the Work. Do not proceed with the Work until unsatisfactory conditions have been corrected in a manner acceptable to the CITY.
- B. Commencement of the Work of this Section shall indicate that the substrate and other conditions of installation are acceptable to the CONTRACTOR and his Applicator, and will produce a finished product meeting the requirements of the Specifications. All defects resulting from such accepted conditions shall be corrected by CONTRACTOR at his own expense.
- C. Stopping Active Leaks: After surface cleaning, any visible leaks shall be reported to the CITY. Any minor leaks not requiring other repairs by the CITY must be sealed using:
1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. Sika Corporation or approve equal.

## 3.2 PREPARATION

- A. Substrate: Concrete surfaces to be coated shall be free of curing compounds and form release agents, laitance and foreign particles that may inhibit bonding. Prior to start of painting, broom clean, vacuum, hydroblast or abrasive blast surfaces to be covered as required, and inspect the substrate. Start of application operations shall indicate acceptance of substrate conditions and full responsibility for the completed Work. Surface preparation procedures shall be in accordance with ICRI (International Concrete Repair Institute) Guideline No. 03732, or comparably approved method. Surface preparation requirement is to expose aggregate and obtain a uniform surface texture resembling an ICRI CSP #4-6 comparators.
- B. Level or grind concrete substrates to manufacturer's recommended tolerances and to produce a textured but uniform installation, including removal of all sharp edges, ridges or depressions.
- C. New Concrete Application – New concrete voids and depressions shall be filled with underlayment material, re-establishing plan finished grades and surface profiles.
1. Moisture Testing
    - a. Floors - New concrete should be installed over a moisture barrier to eliminate moisture transmission through the concrete floor. Prior to the application of

## CONCRETE REHABILITATION

03730-2

## PROJECT NOs 12170 &amp; 12181

materials, the moisture content must be determined using a suitable Moisture Detection System per ASTM F-1869 - "Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride." One such manufacturer is Sealflex Industries, 2925 College Ave. #B4, Costa Mesa, CA (714-708-0850). An average value exceeding 3.0 lbs/1000 ft<sup>2</sup>/24-hr period is unacceptable and will require additional cure time, the application of a surface penetrating vapor barrier or other corrective measures. Re-test after taking corrective measure to ensure an average value below 3.0 lbs.

- b. Moisture Testing for walls and overheads - Test new concrete pours for moisture after completing surface preparation. Utilize ASTM D-4263 "Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method." Any indication of moisture will require additional cure time, the application of a surface penetrating vapor barrier or other corrective measures. Re- test after taking corrective measure to ensure the absence of moisture.
- D. Existing Concrete Application - All oil, grease and chemical contaminants must be removed from the surface of concrete by chemical cleaning. Surfaces must be firm, free of standing water, laitance, form release agents, and be structurally sound.

### 3.3 ADJUSTMENTS AND CLEANING

- A. At the completion of the Work, CONTRACTOR shall remove all materials and debris associated with the Work of this Section.
- B. Restore all other work in a manner acceptable to CITY.
- C. All finished protective coating shall be protected from damage until Final Acceptance of the Work. Protective coating damaged in any manner shall be repaired or replaced at the discretion of CITY, at no additional cost to CITY.

- END OF SECTION -

## PROJECT NOs 12170 &amp; 12181

## SECTION 05500 - METAL FABRICATIONS

## PART 1 - GENERAL

## 1.1 SUMMARY

A. This Section includes the following:

1. Steel framing and supports for applications where framing and supports are not specified in other Sections.
2. Steel weld plates and angles for casting into concrete not specified in other Sections.
3. Miscellaneous steel trim including steel angle corner guards.
4. Handrails and Railings.
5. Walkways.

## 1.2 PERFORMANCE REQUIREMENTS

A. Provide ladders capable of withstanding the effects of loads and stresses within limits and under conditions specified in ANSI A14.3.

## 1.3 QUALITY ASSURANCE

A. Welding: Qualify procedures and personnel according to the following:

1. AWS D1.1, "Structural Welding Code--Steel."

## 1.4 PROJECT CONDITIONS

A. Field Measurements: Verify actual locations of walls and other construction contiguous with metal fabrications by field measurements before fabrication and indicate measurements on Shop Drawings.

1. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating without field measurements. Coordinate wall and other contiguous construction to ensure that actual dimensions correspond to established dimensions.
2. Provide allowance for trimming and fitting at site.

## 1.5 COORDINATION

A. Coordinate installation of anchorages for metal fabrications. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

B. Coordinate installation of steel weld plates and angles for casting into concrete that are specified in this Section but required for work of another Section. Deliver such items to Project site in time for installation.

## PROJECT NOs 12170 &amp; 12181

## PART 2 - PRODUCTS

## 2.1 METALS, GENERAL

- A. Metal Surfaces, General: Provide materials with smooth, flat surfaces, unless otherwise indicated. For metal fabrications exposed to view in the completed Work, provide materials without seam marks, roller marks, rolled trade names, or blemishes.

## 2.2 FERROUS METALS

- A. Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.
- B. Steel Pipe: ASTM A 53/A 53M, standard weight (Schedule 40), unless another weight is indicated or required by structural loads.
- C. Cast Iron: ASTM A 48/A 48M, Class 30, unless another class is indicated or required by structural loads.

## 2.3 STAINLESS STEEL METALS

- A. Structural stainless steel pipe members shall conform to ASTM A312 (316L). Grade B. Handrails could be S.S. 304L.

## 2.4 FASTENERS

- A. General: Unless otherwise indicated, provide F593 Type 316L stainless-steel fasteners for exterior use and for fastening aluminum. Select fasteners for type, grade, and class required.
- B. Cast-in-Place Anchors in Concrete: Anchors capable of sustaining, without failure, a load equal to four times the load imposed, as determined by testing according to ASTM E 488, conducted by a qualified independent testing agency.
  - 1. Threaded or wedge type; Provide bolts, washers, and shims as needed, stainless steel per ASTM F593 and nuts per ASTM F594.
- C. Expansion Anchors: Anchor bolt and sleeve assembly with capability to sustain, without failure, a load equal to six times the load imposed when installed in unit masonry and four times the load imposed when installed in concrete, as determined by testing according to ASTM E 488, conducted by a qualified independent testing agency.
  - 1. Material for Anchors in Interior Locations: Stainless Steel to comply with ASTM A193 Grade B8M, Class 1.

## 2.5 MISCELLANEOUS FRAMING AND SUPPORTS

- A. General: Provide steel framing and supports not specified in other Sections as needed to complete the Work.
- B. Fabricate units from steel shapes, plates, and bars of welded construction, unless otherwise indicated. Fabricate to sizes, shapes, and profiles indicated and as necessary to receive

## METAL FABRICATIONS

05500-2

## PROJECT NOs 12170 &amp; 12181

adjacent construction retained by framing and supports. Cut, drill, and tap units to receive hardware, hangers, and similar items.

1. Fabricate units from slotted channel framing where indicated.
2. Furnish inserts if units are installed after concrete is placed.

## 2.6 STEEL WELD PLATES AND ANGLES

- A. Provide steel weld plates and angles not specified in other Sections, for items supported from concrete construction as needed to complete the Work. Provide each unit with not less than two integrally welded steel strap anchors for embedding in concrete.

## 2.7 METAL BOLLARDS

- A. Fabricate metal bollards from Schedule 80 steel pipe.
- B. Fabricate sleeves for bollard anchorage from steel pipe with 1/4-inch thick steel plate welded to bottom of sleeve. Make sleeves not less than 8 inches deep and 3/4 inch larger than OD of bollard.

## 2.8 FINISHES, GENERAL

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Finish metal fabrications after assembly.

## 2.9 STEEL AND IRON FINISHES

- A. Apply primer to uncoated surfaces of metal fabrications, except those with galvanized finishes and those to be embedded in concrete, sprayed-on fireproofing, or masonry, unless otherwise indicated. Comply with SSPC-PA 1, "Paint Application Specification No. 1: Shop, Field, and Maintenance Painting of Steel," for shop painting.
- B. No primed surfaces shall be in contact with potable or raw water.

# PART 3 - EXECUTION

## 3.1 INSTALLATION, GENERAL

- A. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installing metal fabrications. Set metal fabrications accurately in location, alignment, and elevation; with edges and surfaces level, plumb, true, and free of rack; and measured from established lines and levels.
- B. Fit exposed connections accurately together to form hairline joints. Weld connections that are not to be left as exposed joints.
- C. Field Welding: Comply with the following requirements:

# METAL FABRICATIONS

05500-3

## PROJECT NOs 12170 &amp; 12181

1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
  2. Obtain fusion without undercut or overlap.
  3. Remove welding flux immediately.
  4. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.
- D. Fastening to In-Place Construction: Provide anchorage devices and fasteners where metal fabrications are required to be fastened to in-place construction. Provide threaded fasteners for use with concrete and masonry inserts, toggle bolts, through bolts, lag bolts, wood screws, and other connectors.
- E. Provide temporary bracing or anchors in formwork for items that are to be built into concrete, masonry, or similar construction.
- F. Corrosion Protection: Coat concealed surfaces of aluminum that will come into contact with grout, concrete, masonry, wood, or dissimilar metals with a heavy coat of bituminous paint. No corrosion protection of this type shall be used for items that touch potable or raw water.

## 3.2 INSTALLING MISCELLANEOUS FRAMING AND SUPPORTS

- A. General: Install framing and supports to comply with requirements of items being supported, including manufacturers' written instructions and requirements indicated on Shop Drawings.

## 3.3 INSTALLING METAL BOLLARDS

- A. Anchor bollards in concrete with pipe sleeves preset and anchored into concrete. Fill annular space around bollard solidly with nonshrink, nonmetallic grout; mixed and placed to comply with grout manufacturer's written instructions. Slope grout up approximately **1/8 inch (3 mm)** toward bollard.
- B. Anchor bollards in place with concrete footings. Center and align bollards in holes **3 inches (75 mm)** above bottom of excavation. Place concrete and vibrate or tamp for consolidation. Support and brace bollards in position until concrete has cured.
- C. Fill bollards solidly with concrete, mounding top surface to shed water.

## 3.4 ADJUSTING AND CLEANING

- A. Touchup Painting: Cleaning and touchup painting of field welds, bolted connections, and abraded areas of shop paint are specified in Division 09 painting Sections.

- END OF SECTION -



## PROJECT NOs 12170 &amp; 12181

## SECTION 09220 - PORTLAND CEMENT PLASTER (STUCCO)

PART 1 GENERAL

## 1.1 SUMMARY:

- A. The extent of the plasterwork is shown on the drawings and in schedules. The type of plastering required includes:
  - 1. Portland Cement Plaster (Stucco).
  - 2. Smooth, aggregate and special rendered surface finishing.

## 1.2 REFERENCES

- A. ASTM C91 - Specification for Masonry Cement
- B. ASTM C206 - Specification for Finishing Hydrated Lime
- C. PCA (Portland Cement Association) - Plaster / Stucco Manual

## 1.3 QUALITY ASSURANCE:

- A. Cement Plaster: Perform work in accordance with ASTM C926.
- B. Allowable Tolerances: For flat surfaces, do not exceed 1/8" to 10'-0" for bow, warp, plumb or level, including surfaces to receive applied finishes (tile, etc.).

## 1.4 PRODUCT HANDLING:

- A. Except for sand and water, deliver materials to the site in sealed containers or bags fully identified with manufacturer's name, brand, type, and grade. Store all materials in a dry, well-ventilated space, under cover and off the ground. Use potable water for the mix.

## 1.5 JOB CONDITIONS:

- A. Installer must examine surfaces that are to receive plaster, repair, alter and prepare surfaces to insure a timely completion of the work. Do not proceed with the plasterwork until unsatisfactory conditions have been corrected in a manner acceptable to the Installer and Architect.
- B. Temporary Heat and Ventilation: Comply with ANSI A42.1 and A42.2 as applicable to the work.
- C. Do not apply plaster when ambient temperature is less than 50°F both during installation and until cured.
- D. Protect contiguous work from soiling, spattering, moisture deterioration and other harmful effects, which might result from plastering.

## PROJECT NOs 12170 &amp; 12181

## PART 2 PRODUCTS

## 2.1 PLASTER BASE (SCRATCH AND BROWN) COAT MATERIALS:

- A. Cement: ASTM C150, Type I Portland.
- B. Lime: ASTM C206, Type S.
- C. Aggregate: In accordance with ASTM C897.
- D. Water: Clean, fresh, potable and free of mineral or organic material that may affect plaster.
- E. Bonding Agent: Acrylbond as manufactured by Lambert, Inc.
- F. Admixtures: Air entrainment.

## 2.2 PLASTER FINISH COAT MATERIALS:

- A. Cement: As specified for plaster base coat.
- B. Lime: As specified for plaster base coat.
- C. Color Pigment: Mineral oxide.
- D. Water: Clean, fresh, potable and free of mineral or organic matter that can affect plaster.
- E. Aggregate: Sand, comply with ASTM 6897.

## 2.3 CEMENT PLASTER MIXES (STUCCO):

- A. Job mixed Stucco - Mix bondcrete or mortaseal mason's lime with Portland cement and sand according to ASTM C926, in Portland cement: lime: sand ratios (bags: bags: cu ft) as follows, except repair plaster should vary as required to match strength and composition of existing plaster:
  - 1. Basecoat - Scratch coat 1:1:8 and Brown coat 1:1:10.
  - 2. Finish - Apply exterior stucco finish in accordance with U.S. Gypsum data sheet P-541.
  - 3. Skim Coat: Provide smooth textured skim coat where necessary.
  - 4. Finish Texture: As shown on the drawings and/or finish schedule. Where finish adjoins adjacent plaster, finish and texture shall match adjacent surfaces.

## PART 3 EXECUTION

## 3.1 PREPARATION FOR PLASTERING:

- A. Clean substrates to be plastered, removing loose materials, coatings, and other substances that might impair the work.
- B. Etch concrete and masonry surfaces indicated for direct plastering. Wet surface, scrub with acid etch solution, and rinse thoroughly; repeat if necessary for adequate plaster

## PORTLAND CEMENT PLASTER (STUCCO)

## PROJECT NOs 12170 &amp; 12181

bond.

- C. Apply dash-coat on concrete surfaces indicated for direct plastering, and moisture-cure for 2 days.
- D. Apply bonding agent on concrete surfaces indicated for direct plastering; comply with manufacturer's instructions.
- E. Install permanent and temporary grounds and screeds as required to control plaster thickness and comply with tolerances.
- F. Install plastering accessories, anchored to substrates 8" on center along each flange. Miter corners and spline joints to form tight accurate joints without offsets. All accessories shall have screws installed at a maximum of 24" on center as well as clinched into place.
  - 1. Install resilient-edged casing beads for interior work against exterior-wall door and window frames, and at similar locations as indicated.
  - 2. Control Joints: Install control joints at locations indicated, or if not indicated, at locations complying with the following criteria and approved by Architect.
    - a. Where an expansion or control joint occurs in surface of construction directly behind plaster membrane.
    - b. Where distance between control joints exceed 10' in either direction.
    - c. Where area within panels exceed 100 SF.
    - d. Where panel sizes or dimensions change. Extend joints full width or height of plaster membrane.
    - e. Where panel width to length ratio exceeds 1:4 in Portland cement plaster on metal lath.
- G. Surface Conditioning: Immediately before application of plaster that is to be bonded to concrete or masonry, except where bonding agent is to be used, dampen the surfaces sufficiently to obtain optimum plaster suction.

### 3.2 INSTALLATION OF PLASTER:

- A. General: Comply with ASTM C926; except comply with manufacturer's instructions where more detailed or more stringent.
- B. Plaster Thickness and Number of Coats:
  - 1. Thickness on Vertical Surfaces: Except as otherwise indicated or specified, the minimum thickness of plaster as measured from face of lath, masonry, or concrete to finished plaster surfaces shall be as follows:
    - a. Plaster on metal lath (base):  $\frac{7}{8}$ "
    - b. Plaster on unit masonry surfaces:  $\frac{1}{2}$ ".
    - c. Plaster on concrete surfaces:  $\frac{5}{8}$ "
    - d. Plaster skim coat on interior masonry surfaces:  $\frac{1}{4}$ "
  - 2. Thickness on Horizontal Surfaces: Per ASTM C926

### PORTLAND CEMENT PLASTER (STUCCO)

09220-3

CAM #17-1080

Exhibit 3

Page 191 of 271

## PROJECT NOs 12170 &amp; 12181

3. Number of Coats: Plaster on unit masonry surfaces 2 coats; on concrete or applied over bonding agents, 3 coats; doubling back with brown coat over scratch coat before it is partially dry and set will not be permitted on 3 coat work.
4. Plaster on metal lath (base): 3 coats
- C. Mechanically mix plaster materials at the project site; do not hand mix except where small amounts are needed, using less than one bag of plaster material.
- D. Sequence plasters installation properly with the installation and protection of other work, so that neither will be damaged by the installation of the other.
- E. Install plaster finishes true to line and plane using screeds, accessories, etc. to form clean, sharp edges unless otherwise indicated. Score reveals shall be level and plumb with depth not to exceed ½" thickness of the final installation with finish coat full thickness.
- F. Apply skim-coat plaster with a minimum thickness scratch and leveling coat and a normal minimum thickness finish coat.
- G. Cure Portland Cement Plaster by maintaining each coat in a moist condition for two days following application; keep enclosed and fog-spray (after initial set) as required to prevent dry-out. Contractor shall ensure no foreign materials may fall into the treatment process.

## 3.3 CUTTING AND PATCHING:

- A. Cut, patch, point-up and repair plaster as necessary to accommodate new control joints and other work and to restore cracks, dents, and imperfections. Repair or replace work to eliminate blisters, buckles, excessive crazing and check crackling, dry-outs, efflorescence, sweat-outs, and similar defects, including areas of the work which do not comply with specified tolerances, and where bond to the substrate has failed. Sand smooth-trowel finishes lightly removing trowel marks and arises.

## 3.4 CLEANING AND PROTECTION:

- A. Remove temporary protection and enclosure of other work. Promptly remove plaster from doorframes, windows, and other surfaces that are not to be plastered. Repair floors, walls, and other surfaces stained, marred, or otherwise damaged from plastering work. When plastering work is complete, remove unused materials, containers, and equipment, clean floors of plaster debris.
- B. Installer shall advise the Contractor of requirements for the protection of plaster from deterioration and damage during the remainder of the construction period.

- END OF SECTION -

## PROJECT NOs 12170 &amp; 12181

## SECTION 09810 – EXTERIOR REPAIRS AND WATERPROOFING

PART 1 -- GENERAL

## 1.1 SUMMARY

- A. The CONTRACTOR shall furnish all labor, material and equipment required to provide leak / crack repair and waterproofing systems as specified. Included in this section are crack repair systems to be used in conjunction with stucco repair and leak repair. Completed systems shall be waterproof to prevent infiltration, leaks and deterioration of concrete surfaces.
- B. It is the CONTRACTOR's responsibility to select the methods and means to prepare the existing surfaces to receive repair materials and finish coatings subject to approval by the coating system manufacturers.
- C. Structures that are repaired under this specification shall also be coated in accordance with Section 09900. Rehabilitation products used in conjunction with the coatings (specified in Section 09900) shall work as a system, and the manufacturer of each respective finish coating system shall certify that each product used in the concrete rehabilitation is compatible with their finish coating system prior to application.

## 1.2 REPAIR SYSTEMS

- A. The following repair systems are covered under this Section:
  - 1. Repair of dry surface cracks that are not leaking, not wet or otherwise damp.
  - 2. Repair of leaking cracks, joints, expansion joints or damp surfaces of structures containing water; performed from the exterior with the structure full of water and the structure in service.
  - 3. Repair of spalled stucco or concrete surfaces.

## 1.3 QUALITY ASSURANCE

- A. It is the responsibility of the CONTRACTOR to inspect and provide substrates that are prepared in accordance with these Specifications and the printed directions and recommendations of the manufacturer.

## 1.4 DELIVERY AND STORAGE

- A. All materials shall be new and shall be delivered to the project site in unopened containers that plainly show, at the time of use, the designated name, date of manufacture, color, and name of manufacturer. Materials shall be stored in a suitable protected area that is heated, cooled and maintained under optimum humidity levels as required to maintain conditions within the range recommended by the manufacturer.

## PROJECT NOs 12170 &amp; 12181

## 1.5 SAFETY PRECAUTIONS

- A. Application of repair products shall be performed in strict accordance with the safety recommendations of the manufacturer, and with federal, state, and local agencies having jurisdiction.

## 1.6 WARRANTY

- A. The repair products (both materials and application) shall be warranted for a period of five years after the acceptance of the project by the CITY. A copy of the warranty shall be provided with the submittals. A fully executed warranty shall be transmitted upon CITY acceptance of the repair.

PART 2 -- PRODUCTS

## 2.1 GENERAL

- A. All repair and resurfacing materials shall be manufactured by the same manufacturer and shall be certified for compatibility by each finish coating manufacturer. Project specific submittals shall be provided including application, cure time and surface preparation procedures which permit optimum bond strength with the specified coating. Coatings are specified in Section 09900.
- B. Applicator shall maintain strict adherence to applicable NACE and SSPC recommendations with regard to proper surface preparation and compatibility with existing coatings.

## 2.2 REPAIR OF DRY CRACKS

- A. Dry cracks on the interior and exterior of structures less than 1/16" shall be detailed using Sonneborne Patching compound or equal.
- B. Dry cracks on the interior and exterior of structures greater than 1/16" shall be sealed using Sonoplastic NP1 polyurethane sealant.
- C. Acceptable Manufacturers: Sonneborn, or equal

## 2.3 STUCCO REPAIR

- A. Patching: Sonneborn Gel Patch Non-Shrink Patching Mortar or equal. Acryl 60 mixed at a 1:3 ratio with clean water shall be used as mixing liquid with the Sonneborn Gel Patch patchwork.
- B. Trowel Finish: Thoroseal Plaster Mix. Mixing liquid for Thoroseal Plaster Mix is Acryl 60 mixed at a 1:2 ratio with clean water.
- C. Acceptable Manufacturers: Sonneborn, Thoroseal, or equal

## 2.4 LEAK REPAIR

## EXTERIOR REPAIRS AND WATERPROOFING

09810-2

## PROJECT NOs 12170 &amp; 12181

- A. All existing leaking cracks shall be repaired using a hydrophobic, high solids, polyurethane, liquid chemical injection system for filling and repairing of water leaks in concrete structures. All products shall be NSF compliant if touching potable or raw water.
- B. Waterproof injection system shall be used to form a tough, flexible, closed-cell polyurethane foam that is essentially unaffected by corrosive environments and stops water infiltration. Waterproof injection system shall be specifically developed for injection of fine and ultra fine cracks and joints. Properly sized packers and injection ports shall be used, in accordance with the manufacturer's requirements.
- C. Waterproof injection system shall be ANSI / NSF 61 certified for potable water contact and adequate to be applied over the areas that will receive the cementitious and / or epoxy coatings. Waterproof injection system shall be DeNeef Hydro Active Flex LV Polyurethane chemical grout, or equal.
- D. All products in contact with, above or nearby potable water treatment processes shall be NSF certified for potable water use.

PART 3 -- EXECUTION

## 3.1 GENERAL

- A. All materials for the repair system shall be produced by a single manufacturer. Thinners, cleaners, driers, and other additives shall not be used unless recommended by the manufacturer. Preparation for repair and application of repair materials shall be in accordance with the manufacturer's written instructions.

## 3.2 PROTECTION OF MATERIAL NOT TO BE COATED

- A. Remove, mask, or otherwise protect hardware, stainless steel or fiberglass surfaces, expansion joint covers, machined surfaces, and other surfaces not intended to be coated. Provide drop cloths to prevent materials from falling on or marring adjacent surfaces. Protect working parts of mechanical equipment from damage during surface preparation and product application processes.

## 3.3 ACCEPTABLE APPLICATORS

- A. Repair products shall be applied by an experienced applicator, approved by the manufacturer and according to the manufacturer's specifications.

## 3.4 DRY SURFACE CRACK REPAIRS

- A. Cracks 1/16-inch and Less: Dry cracks identified on the interior and exterior of the structures less than 1/16-inch wide shall be cleaned, allowed to dry a minimum of 48 hours prior to detailing with patching compound repair materials.
- B. Cracks Greater Than 1/16-inch: Dry cracks identified on the interior and exterior of structures that are greater than 1/16-inch in width shall be cleaned and opened to a

## EXTERIOR REPAIRS AND WATERPROOFING

09810-3

## PROJECT NOs 12170 &amp; 12181

minimum width and depth of ¼-inch and calked flush with sealant repair material and cured for a minimum of 48 hours.

### 3.5 LEAK REPAIR

- A. All leaking cracks and damp surfaces shall be repaired by pressure injecting a chemical grout injection system into the prepared crack/surface.
- B. Application procedures shall conform to the recommendations of the coating manufacturer, including material handling, mixing, surface preparation prior to application, environmental controls during application, ventilation, safety, and application equipment. All methods, procedures of mixing, application and curing of the repair material shall be accomplished in strict accordance with manufacturer's printed instructions and recommendations. The waterproof injection system shall be proportioned for the ambient temperature and humidity inside the structure and the coating method used.
- C. Holes drilled for injection ports shall not cut rebar. If rebar is encountered during drilling, the hole shall be abandoned and relocated, and the abandoned hole shall be patched immediately with non-shrink grout flush with the surface of the existing concrete. Flush the cracks and injection ports with water to remove debris prior to inserting packers.
- D. Inject crack with the prepared chemical grout injection system using pressure injection equipment as directed by the manufacturer.
- E. All products in contact with, above or nearby potable water treatment processes shall be NSF certified for potable water use.

### 3.6 STUCCO REPAIR

- A. Patch: Areas shall be patched where overall thickness is greater than ¼-inch and less than ¾-inch. All paint must be removed a minimum of 6" around the area to be patched in order to insure complete adhesion of stucco patch with surrounding substrate.
- B. Trowel Finish: Repair products shall be trowel finished to bring repaired surfaces flush with existing surfaces.

### 3.7 INSPECTION

- A. A final visual inspection shall be made by the CITY. Any deficiencies in the repair shall be marked and replaced according to the procedures specified by the manufacturer.

### 3.8 REPAIRS TO COATED SURFACES

- A. Any damage to the repaired system which in the opinion of the supplier may compromise the integrity of the coating shall be repaired to the satisfaction of the manufacturer.
- B. Repair kits provided by the manufacturer shall be used for all repairs.

## EXTERIOR REPAIRS AND WATERPROOFING

09810-4



## PROJECT NOs 12170 &amp; 12181

## 3.9 CLEANUP

- A. All cloths and waste that might constitute a fire hazard shall be placed in closed metal containers, or disposed of in an acceptable manner at the end of each day. Upon completion of the work, all staging, scaffolding, and containers shall be removed from the site. Resin spots, oil, or stains upon adjacent surfaces and floors shall be completely removed, and the entire job left clean and acceptable to the CITY.

- END OF SECTION -

## PROJECT NOs 12170 &amp; 12181

## SECTION 09900 - PAINTING

PART 1 -- GENERAL

## 1.1 SUMMARY

- A. CONTRACTOR shall furnish all labor, tools, materials, supervision and equipment necessary to do all the work specified herein and as required for a complete installation, including surface preparation, priming and painting of existing and CONTRACTOR furnished equipment, materials and structures.
- B. Coat all new work, all existing exterior concrete / masonry, existing exterior steel surfaces as identified and other interior and exterior surfaces as identified in the project documents.
- C. Coatings in certain locations in this project will be applied nearby active water treatment process tanks that are open to the atmosphere. Spray application (or other application methods potentially injurious to drinking water quality) shall not be allowed.

## 1.2 QUALIFICATIONS

- A. CONTRACTOR shall have minimum five years experience in industrial painting.
- B. CONTRACTOR shall submit with his bid a list of water treatment plant work they have completed in the last five years and or related work. Included shall be names, addresses, contacts and phone numbers.

## 1.3 GENERAL INFORMATION AND DESCRIPTION

- A. All paint shall be applied in conformance with the manufacturer's published specifications.
- B. The terms "coating" and "paint", as used interchangeably herein, includes alkyds, acrylics, emulsions, enamels, epoxies, paints, polyurethanes, fluorourethanes, zinc rich primers and other products, whether used as prime, intermediate, or finish coats.
- C. Dry Film Thickness (DFT) refers to paint thickness, measured in mils (1/1000 inch), of a coat of paint in its cured state.
- D. CONTRACTOR shall obtain all permits, licenses and inspections and shall comply with all laws, codes, ordinances, rules and regulations promulgated by authorities having jurisdiction which may bear on the work. This compliance will include Federal Public Law 91-596 more commonly known as the "Occupational Safety and Health Act of 1970".
- E. CONTRACTOR shall be responsible for any damage to any surrounding structures such as buildings, cars, landscaping, sidewalks, fences, etc. as a result of paint splatter, blast abrasive, mechanical damage, etc. All damage shall be repaired and restored to the original condition.

## PAINTING

09900-1

## PROJECT NOs 12170 &amp; 12181

## 1.5 MANUFACTURERS

- A. All painting materials shall be as manufactured by Carboline, Sherwin Williams, Tnemec, International Paint, or equal.

## 1.6 WARRANTY

- A. All work covered in these specifications shall be guaranteed for a period of one year. CONTRACTOR shall provide materials and labor necessary to repair any system failures during the warranty period.
- C. After Substantial Completion of the project, CITY will perform an inspection at one year (during the twelfth month following Substantial Completion). CITY will notify CONTRACTOR when this inspection is scheduled. The CONTRACTOR shall provide a representative to attend the inspection and provide the necessary safety equipment to perform the inspection.
- D. CONTRACTOR shall extend the terms of this warranty to cover repaired parts and all replacement parts furnished under the warranty provisions for a period of one year from the date of their installation.
- E. If within ten days after CITY gives CONTRACTOR notice of a defect, failure, or abnormality of the work, CONTRACTOR neglects to make, or undertake with due diligence to make, the necessary repairs or adjustments, CITY is hereby authorized to make the repairs or adjustments or order the work to be done by a third party. The cost of the work shall be paid by CONTRACTOR.
- F. Exposure to sunlight and normal atmospheric conditions characteristic of the Fort Lauderdale, Florida area shall not void the provisions of this warranty.

## 1.10 QUALITY ASSURANCE

- A. General: Applicator shall be trained in application techniques and procedures of coating materials and shall demonstrate a minimum of five years successful experience in such application. Applicator shall maintain, throughout duration of application, a crew of painters who are fully qualified.
- B. Single source responsibility shall be provided. Materials shall be products of a single manufacturer. Other, additional materials, which are produced or are specifically recommended by coating system manufacturer to ensure compatibility of system, may be used
- C. Inspection by CITY, or the waiver of inspection of any particular portion of the work, shall not relieve CONTRACTOR of his responsibility to perform the work in accordance with these Specifications.
- D. Where protective coatings are to be performed by a subcontractor, said subcontractor must provide five references which show that the painting subcontractor has previous successful experience with the specified or comparable coating systems. Include the

## PAINTING

09900-2

## PROJECT NOs 12170 &amp; 12181

name, address, and the telephone number for the owner of each installation for which the painting subcontractor provided the protective coating.

- E. Environmental Requirements: Apply coating materials per manufacturer's printed data sheet instructions:
1. Refer to specific product data sheets for minimum surface temperature requirements. Surface temperatures shall be at least 5 degrees F (15 degrees C) above dew point and rising.
  2. Provide for proper ventilation and/or dehumidification using explosion proof equipment and allow operation during application and cure cycle of the coating systems as recommended by manufacturer.
  3. Provide adequate illumination using explosion proof lights and equipment.
  4. Provide work site free of airborne dust, debris, and other contaminants.

## 1.11 QUALITY WORKMANSHIP

- A. CONTRACTOR shall be responsible for the cleanliness of his painting operations and shall use covers and masking tape to protect the work whenever such covering is necessary, or if so requested by CITY. Any unwanted paint shall be carefully removed without damage to any finished paint or surface. If damage does occur, the entire surface, adjacent to and including the damaged area, shall be repainted without visible lapmarks and without additional cost to CITY.
- B. CONTRACTOR shall be responsible for any dust, debris and/or paint droplets which leave the City's property and/or cause damage to neighboring property. Insufficient containment of abrasive debris and/or generation of nuisance dust is just cause for shut-down of the job until proper protective measures are in place and violations have been remedied.

## 1.12 SAFETY AND HEALTH REQUIREMENTS

- A. CONTRACTOR is responsible for the safety of the work and the job site. CONTRACTOR shall provide and position all safety equipment, rigging, lighting, scaffolding, labor and calibrated instruments.
- B. In accordance with requirements of OSHA Safety and Health Regulations for General Industry (29 CFR 1910) and for Construction (29 CFR 1926), and the applicable requirements of regulatory agencies having jurisdiction, as well as manufacturer's printed instructions, appropriate technical bulletins, manuals, and material safety data sheets, CONTRACTOR shall provide and require use of personnel protective and safety equipment for persons working in or about the project site.
- C. Adequate ventilation shall be provided and maintained during surface preparation, coating mixing, coating application, and curing phases of work to adequately remove dust and fumes to prevent injury to workmen or accumulation of volatile gases.

## PAINTING

09900-3

## PROJECT NOs 12170 &amp; 12181

Respirators shall be worn by persons engaged or assisting in spray painting. CONTRACTOR shall provide ventilating equipment and all necessary safety equipment for the protection of the workmen and the work.

- D. CONTRACTOR shall provide and maintain safe, secure rigging and scaffolding in compliance with the OSHA scaffold standards 29 CFR 1926.450-454. CONTRACTOR is responsible for all attachments to or imposing loads on the structures. Any attachments to the structure are prohibited unless acceptable to CITY in advance. If CITY allows attachments, they shall be responsibility of CONTRACTOR.
- E. Fall protection or prevention shall be provided in accordance with 29 CFR 1926.104, 29 CFR 1926.105, and 29 CFR 1926.500-503.
- F. All paint shall comply with all requirements of the Air Pollution Regulatory Acts concerning the application and formulation of paints and coatings for an area in which the paints are applied. Specifically, paints shall be reformulated as required to meet the local, State and Federal requirements.
- G. Coatings used in conjunction with potable water supply systems shall have NSF approval for use with potable water and shall not impart a taste or odor to the water.
- H. All rigging shall meet OSHA requirements, conform to industry standards and shall be operated in a safe manner. CONTRACTOR is responsible for the integrity of rigging connections. All rods and other tank appurtenances that will be used for rigging purposes shall be carefully checked for structural integrity before they are used for climbing or rigging. Deficiencies shall be reported and corrected before use.

## 1.14 PROTECTION OF STRUCTURES

- A. CONTRACTOR shall use extreme diligence to assure that adjacent vehicles, structures, buildings, equipment, hardware, fixtures, water tank openings, flumes, hydrotreaters, all process areas and other materials are protected against process and waste water, paint spillage, paint drips and other damage. Damage shall be corrected by cleaning, repairing or replacing the item as acceptable to CITY, at no additional cost to CITY.
- B. CONTRACTOR shall not allow foreign materials into the treatment process.

## 1.15 SHIPPING, HANDLING AND STORAGE

- A. Products shall be delivered in manufacturer's original unopened containers and shall be subject to inspection by CITY. Packages shall not be opened until they are inspected by CITY and required for use. Each container shall have manufacturer's label, intact and legible. Label for each container shall contain the following:
  - 1. Manufacturer's name
  - 2. Type of paint

## PAINTING

09900-4

## PROJECT NOs 12170 &amp; 12181

3. Manufacturer's stock number
  4. Color name and number
  5. Instructions for thinning, where applicable
- B. Where thinning is necessary, only the product of the manufacturer furnishing the paint shall be used. All such thinning shall be done strictly in accordance with the manufacturer's instructions, and with the full knowledge of CITY.
- C. Materials and their storage shall be in full compliance with the requirements of pertinent codes and fire regulations. All painting materials shall be stored under cover in a clean, dry, well-ventilated place protected from sparks, flame, direct rays of the sun or extreme temperatures. Storage shall be maintained at a temperature between 40° F and 90° F, unless the requirements of the manufacturer are more restrictive. Receptacles shall be placed outside buildings for paint gates and containers. Paint waste shall not be disposed of in plumbing fixtures, drains or on the ground.
- 1.16 ADDITIONAL PAINT
- A. At the end of the project, CONTRACTOR shall turn over to CITY one one-gallon can of each type and color of paint, primer, thinner or other coating used in the field painting. If the manufacturer packages the material concerned in gallon cans, then it shall be delivered in unopened labeled cans as it comes from the factory. If the manufacturer does not package the material in gallon cans, and in the case of special colors, the materials shall be delivered in new gallon containers, properly closed with typed labels indicating brand, type, color, etc. The manufacturer's literature describing the materials and giving directions for their use shall be furnished in three bound copies. A type-written inventory list shall be furnished at the time of delivery.

PART 2 -- PRODUCTS

## 2.1 MATERIALS

- A. Table 09900-1 depicts acceptable coatings.

**Table 09900-1  
Product Listing**

<b>Reference Number</b>	<b>Description</b>	<b>Manufacturers Reference Carboline (or equal)</b>
100	Waterborne Acrylic	Carbocrylic 120
101	Polymeric Epoxy Amine	Rustbond
102	Epoxy Polyamido Amine	Sanitile 600 & 600 TG
103	Aluminum Epoxy Mastic	Carbomastic 15
104	Cycloaliphatic Amine Epoxy	Carboguard 890 & 890 LT
105	Waterborne Acrylic	Galoseal WB

PAINTING

09900-5

## PROJECT NOs 12170 &amp; 12181

107	Alkyd Enamel, Gloss	Carbocoat 45
108	Aliphatic Acrylic Polyurethane	Carbothane 134 HG
109	Waterborne Acrylic	Sanitile 155
110	Aliphatic Acrylic-Polyester Polyurethane	Carbothane 133 HB
111	Waterborne Acrylic Elastomer	Flexxide Elastomer
117	Coal Tar Epoxy	Bitumastic 300 M
125	Polyamine Epoxy	Carboguard 891 HS
128	Modified Siloxane Hybrid	Carboxane 2000 Satin

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- B. No lead containing protective coating materials may be used on this project.

PART 3 -- EXECUTION

## 3.1 INSPECTION OF SURFACES

- A. Before application of the prime coat and each succeeding coat, all surfaces to be painted shall be subject to inspection by CITY. Any defects or deficiencies shall be corrected by CONTRACTOR before application of any subsequent coating.
- B. CITY will inspect all phases of the Work to verify that it is in accordance with the requirements of the Specifications. CONTRACTOR shall facilitate this inspection as required, including allowing ample time for the inspections and safe access to the work.
- C. CONTRACTOR is not allowed to proceed with subsequent phases of the Work unless acceptable to CITY. Prior to demobilization in a particular section worked, a final acceptance inspection will be performed by CITY.
- D. The inspection by CITY in no way relieves CONTRACTOR of the responsibility to comply with all requirements of this specification, and to provide comprehensive inspections of its own.
- E. CONTRACTOR shall furnish, until final acceptance of the coating system, all equipment and instrumentation needed for self-inspection of all phases of the Work.
- F. Deviations or nonconformances are items that do not meet the specified requirements and require either rework or repair as determined by CITY. Deviations will be recorded by CITY.

## 3.2 EQUIPMENT

- A. Effective oil and water separators in conformance with ASTM D 4285 shall be used in all compressed air lines serving sandblasting operations to remove oil or moisture from the air before it is used. Separators shall be placed as far as practicable from the compressor.

## PAINTING

09900-6

## PROJECT NOs 12170 &amp; 12181

- B. All equipment for application of the paint and the completion of the work shall be furnished by CONTRACTOR and shall comply with recommendations of the paint manufacturer.

## 3.3 WORK IN CONFINED SPACES

- A. CONTRACTOR shall provide and maintain safe working conditions for all employees. Fresh air shall be supplied continuously to confined spaces through the combined use of existing openings, forced-draft fans, or by direct air supply to individual workers. Paint fumes shall be exhausted to the outside from the lowest level in the contained space.
- B. Electrical fan motors shall be explosion proof if in contact with paint fumes. No smoking or open fires will be permitted in, or near, confined spaces where painting is being done.

## 3.4 SURFACE PREPARATION

- A. General: Surface preparation shall be as recommended by the paint manufacturer's published application instructions.
- B. Surfaces to be painted shall be clean and dry, and free of dust, rust, scale and all foreign matter. No solvent cleaning, power or hand tool cleaning shall be permitted unless acceptable to CITY or specified herein.
- C. Except as otherwise provided, all preparation of metal surfaces shall be in accordance with SSPC Specifications SP-1 through SP-15. Where SSPC Specifications are referred to in these Contract Documents, the corresponding Pictorial Surface Preparation Standard shall be used to define the minimum final surface conditions to be supplied. Grease and oil shall be removed and the surface prepared by hand tool cleaning, power tool cleaning or blast cleaning in accordance with the appropriate Specification SP-1 through SP-15. Blast cleaning shall not be allowed when there is a potential of debris falling on open flumes, hydrotreaters, water tank openings, or other process area.
- D. Weld flux, weld spatter and excessive rust scale shall be removed by power tool cleaning as per SSPC-SP-3.
- E. Hardware accessories, machined surfaces, plates, lighting fixtures and similar items in place prior to cleaning and painting, and not intended to be painted, shall be protected or removed during painting operations and repositioned upon completion of painting operations.
- F. Any abraded areas of shop or field applied coatings shall be touched up with the same type of shop or field applied coating, even to the extent of applying an entire coating, if necessary. Touch-up coatings and surface preparations shall be in addition to and not considered as the first field coat.
- G. Abrasives from blasting shall be thoroughly removed, using vacuums if necessary. No surface, which has been blasted, shall be painted until inspected by CITY.

## PAINTING

09900-7



## PROJECT NOs 12170 &amp; 12181

- H. Threaded portions of valve and gate stems, machined surfaces which are intended for sliding contact, surfaces which are to be assembled against gaskets, surfaces or shafting on which sprockets are to fit, or which are intended to fit into bearings, machined surfaces of bronze trim on slide gates and similar surfaces shall be masked off to protect them from the sandblasting of adjacent surfaces. All installed equipment, mechanical drives, and adjacent painted equipment shall be protected from sandblasting. Protection shall prevent any sand or dust from entering the mechanical drive units or equipment where damage could be caused. Blast cleaning shall not be allowed when there is a potential of debris falling on open flumes, hydrotreaters, water tank openings, or other process area.
- I. Ferrous Metal Surfaces:
1. All ferrous metal surfaces not required to be galvanized shall be cleaned of all oil, grease, dirt, rust and tight and loose mill scale by abrasive blasting in accordance with SSPC-SP-10 Near White Metal Blast Cleaning with a 2 - 3 mil profile. Prime coat shall follow blasting before any evidence of corrosion occurs.
  2. Field surface preparation of small, isolated areas such as field welds, repair of scratches, abrasions or other marks to the shop prime or finish shall be cleaned by power tools in accordance with SSPC-SP-3, or in difficult and otherwise inaccessible areas by hand cleaning in accordance with SSPC-SP-2 and spot primed.
- J. Primed or Previously Coated Metal Surfaces: All coated surfaces shall be cleaned prior to application of successive coats. Cleaning shall be done in accordance with SSPC-SP-12 Water Jetting (LP WC - Low Pressure Water Cleaning / WJ-4 Light Cleaning). Utilize SSPC-SP 2 and / or SSPC-SP3 guidelines to address any rusted areas, bare exposed steel, damaged and/or loose coatings. Spot prime all hand and power tool cleaned areas as required prior to application of the recommended coating system.
- K. Galvanized, Zinc, Copper and Other Nonferrous Metal Surfaces: All nonferrous metal surfaces shall be given one coat of metal passivator or metal conditioner before applying the prime coat. The passivator or conditioner shall be compatible with the complete paint system identified in the paint schedule.
- Q. Concrete and Masonry Surfaces:
1. Concrete and masonry surfaces to be painted shall be prepared by removing efflorescence, chalk, dust, dirt, grease, oil, form coating and tar and by roughening to remove glaze. Concrete surfaces shall receive a light abrasive blast to expose bug holes. Blast cleaning shall not be allowed when there is a potential of debris falling on open flumes, hydrotreaters, water tank openings, or other process area.
  2. All concrete that is not sound or has been damaged shall be removed to a sound concrete surface. All surfaces shall be repaired prior to commencement of the coating operation.
  3. Concrete and masonry surfaces are to be cured for at least 28 days prior to coating them, or per manufacturer's recommendations.

## PAINTING

09900-8

## PROJECT NOs 12170 &amp; 12181

4. Concrete surfaces specified by the paint manufacturer to be acid etched shall be etched in accordance with the manufacturer's instructions. The surface shall then be thoroughly scrubbed with clean water, rinsed, and allowed to dry. The surface shall be tested with a moisture meter to determine when dry before coating.
  5. All rinse water shall be collected and properly disposed. The rinse water may only be discharged to the plant drains after being properly neutralized. Neutralization procedures must be approved in advance by the CITY.
- R. Existing Concrete and Masonry Surfaces to be Repainted:
1. Surface preparation of existing concrete surfaces shall be in conformance with the manufacturer's recommendations.
  2. All concrete, masonry and stucco that is not sound or has been damaged shall be removed to a sound surface. Concrete, masonry and stucco shall be repaired as specified in other sections prior to applying protective coatings.
  3. All contaminants including: oils, grease, unsound or incompatible existing coatings, waxes, form release, curing compounds, efflorescence, sealers, salts, or other contaminants shall be removed.
  4. Where allowed by the CITY, existing concrete surfaces to be coated shall be initially cleaned using low pressure, minimum 3,500 psi, water pressure in accordance with SSPC-SP12 / NACE No. 5. A maximum 5,000 psi water pressure in accordance with SSPC-SP-12 / NACE No. 5 may be required to remove additional surface contaminants such as efflorescence. The presurface preparation inspection by the manufacturer shall be performed after this initial cleaning.
- S. PVC Pipe Surfaces: Prior to painting, all PVC pipe surfaces shall be cleaned per SSPC-SP-1, followed by a light sanding with medium weight sandpaper. The pipe shall be free of sanding dust prior to painting.
- T. Gypsum Wallboard Surfaces: Sand joint compound smooth and feather edge.
- U. Wood Surfaces: Sand rough areas, seal knots and pitch pockets. Fill cracks and nail holes after primer is dry. Previously coated surfaces shall be cleaned in accordance with SSPC-SP-12, Water-Jetting (LP WC - Low Pressure Water Cleaning / WJ-4 Light Cleaning). Utilize SSPC SP 2 and / or SSPC SP3 guidelines to address any damaged and / or loose coatings. Surfaces must be clean and dry prior to application of the recommended coating system.
- V. Aluminum Surfaces: Prepare the substrate in accordance with SSPC-SP1 guidelines to remove dirt, dust, oil and all other contaminants.

## PROJECT NOs 12170 &amp; 12181

## 3.5 PREPARATION OF MATERIALS

- A. Mechanical mixers, capable of thoroughly mixing the pigment and vehicle together, shall mix the paint prior to use where required by manufacturer's instructions; thorough hand mixing will be allowed for small amounts up to one gallon.
- B. Pressure pots shall be equipped with mechanical mixers to keep the pigment in suspension, when required by manufacturer's instructions. Otherwise, intermittent hand mixing shall be done to assure that no separation occurs. All mixing shall be done in accordance with SSPC Volume 1, Chapter 4, "Practical Aspects, Use and Application of Paints" and/or with manufacturer's recommendations.
- C. Catalysts or thinners shall be as recommended by the manufacturer and shall be added or discarded strictly in accordance with the manufacturer's instruction.
- D. When using two component materials, only complete kits shall be mixed.

## 3.6 COATING SCHEDULE

- A. General: CONTRACTOR shall adhere to this coating schedule, providing those paints named or equal. DFT shall mean the total minimum dry film thickness per application measured in mils. Products are referenced by numbers listed in Article 2.01, "Materials," and listed in Table 09900-1.

## B. Metal Surfaces, Corrosive Exposure

- 1. Metal surfaces that come in contact with corrosive atmospheres, including but not limited to equipment, piping and miscellaneous metals within the pump station, shall be painted as follows:

2. Coating System:

<u>Application</u>	<u>No.</u>	<u>Description</u>	<u>DFT</u>
First - 1 coat	125	Polyamine Epoxy	4.0 - 6.0
Finish - 1 coat	125	Polyamine Epoxy	<u>6.0 - 8.0</u>

Min. Total 12 Mils

## C. Concrete and Masonry Surfaces, Existing Interior Exposure

- 1. Existing interior painted masonry and concrete surfaces indicated on the Drawings to be painted or surfaces that are disturbed due to construction activity shall be painted as described below:

## PROJECT NOs 12170 &amp; 12181

2. Coating System:

<u>Application</u>	<u>No.</u>	<u>Description</u>	<u>DFT</u>
First - 1 coat	104	Cycloaliphatic Amine Epoxy	4.0 - 6.0
Finish - 1 coat	104	Cycloaliphatic Amine Epoxy	<u>4.0 - 6.0</u>

Min. Total 10 Mils

## D. Concrete and Masonry Surfaces, Interior Exposure

- Interior exposed masonry and concrete surfaces which are not included in other coating systems, including the following types of surfaces, shall be painted as described below:

- New interior masonry and concrete walls, columns, beams and ceilings.

2. Coating System:

<u>Application</u>	<u>No.</u>	<u>Description</u>	<u>DFT</u>
Prep coat	102	Polyamide Amine Epoxy	80-100 (sf/g)
First - 1 coat	104	Cycloaliphatic Amine Epoxy	4.0 - 6.0
Second - 1 coat	104	Cycloaliphatic Amine Epoxy	4.0 - 6.0
Finish - 1 coat	104	Cycloaliphatic Amine Epoxy	<u>4.0 - 6.0</u>

Min. Total 15.0 Mils

## E. Concrete, Stucco and Masonry Surfaces, Existing Exterior Exposure (Nonwater Bearing)

- Previously painted exterior concrete and masonry surfaces and the surfaces that received a waterproofing coating identified in Section 09810.

2. Coating System:

<u>Application</u>	<u>No.</u>	<u>Description</u>	<u>DFT</u>
First - 1 coat	100	Waterborne Acrylic	1.0 - 2.0
Second - 1 coat	111	Waterborne Acrylic Elastomer	6.0
Finish - 1 coat	111	Waterborne Acrylic Elastomer	<u>6.0</u>

Min. Total 13 Mils

## F. Concrete, Stucco and Masonry Surfaces, Exterior Exposure (Nonwater Bearing)

- All new exterior concrete, block or stucco surfaces and exterior painted surfaces that are added to or modified shall be painted as follows:

## PROJECT NOs 12170 &amp; 12181

- a. All new exterior building concrete, block and stucco surfaces.
- b. Exterior painted surfaces that are added to or modified as indicated on the Drawings.

2. Coating System:

<u>Application</u>	<u>No.</u>	<u>Description</u>	<u>DFT</u>
Prep coat	102	Polyamide Amine Epoxy	80-100 (sf/g)
First - 1 coat	111	Waterborne Acrylic Elastomer	6.0
Finish - 1 coat	111	Waterborne Acrylic Elastomer	<u>6.0</u>
			Min. Total 12 Mils

## G. Concrete and Masonry Surfaces, Existing Exterior Exposure, Water Bearing Structures

1. All exterior surfaces of water bearing structures shall be rehabilitated in accordance with Section 09810. Exterior painted surfaces that are added to or modified shall be painted as follows:

2. Coating System:

<u>Application</u>	<u>No.</u>	<u>Description</u>	<u>DFT</u>
First - 1 coat	100	Waterborne Acrylic	1.0 - 2.0
Second - 1 coat	111	Waterborne Acrylic Elastomer	6.0
Finish - 1 coat	111	Waterborne Acrylic Elastomer	<u>6.0</u>
			Min. Total 13 Mils

## H. PVC Piping and Appurtenances, Interior (Atmospheric) Exposure

1. PVC pipes, valves, and accessories, shall be coated as follows:

2. Coating System:

<u>Application</u>	<u>No.</u>	<u>Description</u>	<u>DFT</u>
Finish - 1 coat	104	Cycloaliphatic Amine Epoxy	4.0 - 6.0

## I. PVC Piping and Appurtenances, Exterior Exposure

1. PVC pipes, valves, and accessories, shall be coated as follows:

## PROJECT NOs 12170 &amp; 12181

2. Coating System:

<u>Application</u>	<u>No.</u>	<u>Description</u>	<u>DFT</u>
Finish - 1 coat	104	Cycloaliphatic Amine Epoxy	4.0 - 6.0
Finish - 1 coat	110	Aliphatic Acrylic-Polyester Polyurethane	<u>3.0 - 5.0</u>
Min. Total			9.0 Mils

## J. Gypsum Wallboard Surfaces, Interior Exposure

1. All exposed gypsum wallboard surfaces (walls and ceilings), including existing surfaces, shall be coated as follows:

2. Coating System:

<u>Application</u>	<u>No.</u>	<u>Description</u>	<u>DFT</u>
First - 1 coat	100	Waterborne Acrylic	1.0 - 2.0
Finish - 1 coat	109	Waterborne Acrylic	<u>2.0 - 3.0</u>
Min. Total			4.0 Mils

## K. Wood Surfaces, Interior Exposure

1. All exposed wood surfaces including existing surfaces identified on the Drawings, shall be coated as follows:

2. Coating System:

<u>Application</u>	<u>No.</u>	<u>Description</u>	<u>DFT</u>
First - 1 coat	100	Waterborne Acrylic	1.0 - 2.0
Second - 1 coat	107	Alkyd Enamel, Gloss	2.0 - 3.0
Finish - 1 coat	107	Alkyd Enamel, Gloss	<u>2.0 - 3.0</u>
Min. Total			6.5 Mils

## L. Aluminum Surfaces, Exterior Exposure

1. Existing exterior handrails shall be coated as follows:

2. Coating System:

<u>Application</u>	<u>No.</u>	<u>Description</u>	<u>DFT</u>
First - 1 coat	105	Waterborne Acrylic	0.5 - 1.0
Second – 1 coat	108	Aliphatic Acrylic Polyurethane	<u>2.0 - 3.0</u>
Min. Total			3.0 Mils

## PAINTING

09900-13

## PROJECT NOs 12170 &amp; 12181

## 3.7 COATING APPLICATION

- A. General: All paint shall be applied by experienced painters, properly styled brushes, rollers, sprayers or other applicators in accordance with the requirements of the coating manufacturer's product data sheet, and applicable SSPC standards. In the event of a conflict between the manufacturers' technical data and the requirements of this Section, this Section shall govern unless the requirements of the manufacturer are more restrictive.
- B. Quality of Surface Preparation: CONTRACTOR shall verify that the surface exhibits the specified degree of cleaning immediately prior to painting. CONTRACTOR shall reclean deficient areas prior to applying coatings. If contamination of the surface (e.g., dust) occurs prior to the application of the first full coat, all contamination shall be removed prior to painting.
- C. Time Restrictions: Coatings shall only be applied to bare metal surfaces on the same day that the surface preparation was performed.
- D. Ambient Conditions Restrictions: Coatings are to be applied per the manufacturer's requirement.
- E. Any paint that is exposed to unacceptable conditions (e.g. rain or dew) shall be removed and replaced prior to adequate curing.
- F. The work areas which have been blasted and received any coating shall be protected from ongoing blasting and painting activities.
- G. The primer shall not be applied on a nonprepared surface. Previous blasted and primed surfaces shall be tied in by blasting 2-inches into primed area. Blast cleaning shall not be allowed when there is a potential of debris falling on open flumes, hydrotreaters, water tank openings, or other process area.
- H. The number of coats specified shall be minimum number acceptable. Apply additional coats as needed to provide a smooth, even application and achieve the specified DFT.
- I. Application Methods: Regardless of application method used, paint drips, splashes, and spills must be controlled.
- J. Coverage and Continuity: Aesthetics of the application is critical. Each coat shall be applied at the proper consistency in a workmanlike manner to assure thorough wetting of the substrate or underlying coat, and to achieve a smooth, streamline surface. All shadow-through, pinholes, bubbles, blisters, fish eyes, skips, misses, drips, lap marks between applications, or other visible discontinuities in any coat shall be repaired before the application of subsequent coats. Runs or sags may be brushed out while the material remains wet. All surfaces shall be thoroughly coated with special attention to hard-to-reach areas, and irregular surfaces such as crevices and fasteners. When coating items such as bolts, the coating shall be applied from multiple directions to assure complete coverage.

## PAINTING

09900-14

## PROJECT NOs 12170 &amp; 12181

- K. Alternating Coats: Provide at least two shade difference between coats. The finish coat shall have sufficient hiding power to cover intermediate coat color. Visible detection of the underlining coat will not be acceptable.
- L. Recoat Times: Each coating shall only be applied after the previous coat has been allowed to dry as required by the manufacturer's written instructions, but as soon as possible to minimize the length of time that the coating is exposed to dust and contamination. Coatings shall not be allowed to remain exposed for longer than the manufacturer's written instructions prior to overcoating. If a coat exceeds the manufacturer's maximum recoat times for any reason, the coating shall be removed and replaced. As an alternative, the coating manufacturer can provide written instructions for specialized preparation (e.g., scarifying the surface) to properly prepare the surface to receive the next coat. The specialized steps can be undertaken only if acceptable to CITY in writing. The specialized cleaning or removal and replacement of the coatings shall be performed at no additional cost to CITY.
- M. Surface Cleanliness Between Coats: The surface of each coat shall be thoroughly cleaned prior to the application of the next to remove dirt, dust, and other interference material. Particular attention shall be paid to the removal of detrimental residue from surfaces such as corners and pockets. Surfaces shall be cleaned by brushing, vacuuming, or blowing down with compressed air (using compressed air will only be allowed at locations where the blown debris cannot enter the water treatment process). If the coatings are slightly tacky, methods such as vacuuming shall not be used. If grease or oil has become deposited on the surface of any of the applied coats, the contaminants shall be removed by solvent cleaning in accordance with SSPC-SP-1 prior to the application of the next coat.
- N. Stripe Coating: Surfaces identified to receive a stripe coat shall be applied to all edges, crevices, and irregular surface configurations such as bolts. The stripe coat shall be applied after the prime coat has cured sufficiently as identified in the manufacturer's literature. The stripe coat shall be worked in by brush and allow it to dry sufficiently prior to the application of the intermediate or final coat.
- O. Wet Film Thickness: A wet film thickness gage shall be used in accordance with ASTM D 4414 to verify the thickness of each coat at the time of application. The thickness of each coat shall be strictly controlled to assure that the minimums necessary to achieve complete coverage are applied. Frequent measurement of wet film thickness is required to assure that proper coating thickness is being applied.
- P. Dry Film Thickness: The dry film thickness objectives for the project are indicated in the Coating Schedule. The thickness of the existing coating must be accounted for when measuring the thickness of the newly applied coats. Coating thickness shall be determined by the use of a properly calibrated "Nordson-Mikrotest" (or equal) dry mil thickness gauge or other measuring instrument determined to be appropriate by CITY. Measurements shall be made in accordance with SSPC PA-2.
- Q. Coating Adhesion: All applied coats shall be well adhered to each other and to the substrate. If the application of any coat causes lifting of an underlying coat, or there is

## PAINTING

09900-15



## PROJECT NOs 12170 &amp; 12181

poor adhesion between coats or to the substrate, the coating shall be removed in the affected area and the material reapplied.

### 3.8 REPAIR OF DAMAGE AND UNACCEPTABLE COATINGS

- A. Surface Preparation of Localized Areas: Repair localized damage, corrosion, and unacceptable coatings in accordance with SSPC-SP-1 using a solvent that is acceptable to the paint manufacturer. If the damage does not extend to the substrate, the area shall be prepared by power tool cleaning to remove all loose material in accordance with SSPC-SP-1 or SP-3. If the damage extends to the substrate, the affected areas shall be prepared in accordance with SSPC-SP-11.
- B. Feathering of Repair Areas: CONTRACTOR shall feather sand the existing coating surrounding each repair location. A distance of one to two inches to shall be feather sanded to provide a smooth, tapered transition into the existing intact coating. Verify the edges of coating around the periphery of the repair areas are tight and intact by probing with a dull putty knife in accordance with the requirements of SSPC-SP-3. The existing coating in the feathered area shall be roughened to assure proper adhesion of the repair coats.
- C. Coating Application in Repair Areas: When the bare substrate is exposed in the repair area, all coats of the system shall be applied to the specified thickness. When the damage does not extend to the bare substrate, only the damaged coat(s) are to be reapplied. The thickness of the system in overlap areas shall be maintained within the specified total thickness tolerances. When, in the judgment of CITY, the finish coat repair has an unsatisfactory appearance, a cosmetic coat of finish shall be applied over the spot areas and adjacent surfaces to blend the repair area into the surrounding coating.

### 3.9 MATERIAL SAFETY DATA SHEETS

- A. Material Safety Data Sheets (MSDS) shall be maintained at the job site for each chemical product on the job site, including but not limited to coatings, thinners, solvents, cleaning agents, abrasives, welding materials, and flexible sealant material.
- B. CONTRACTOR and CITY shall exchange MSDS of any hazardous chemicals that are or will be stored at the Project site. CONTRACTOR and CITY shall each appoint an individual who shall be responsible for overseeing the proper exchange of information regarding toxic chemicals, potential hazards, safe procedures, and proper protective equipment, etc.

### 3.10 HOUSEKEEPING AND WASTE DISPOSAL

- A. The accumulation of empty paint cans, combustibles, and other debris is unacceptable. Waste chemical solutions, oily rags, and waste shall be removed from the site daily.
- B. All paint drips and splashes shall be removed from surfaces not intended to be painted. Removal shall be by proper methods of washing and scraping, using care not to scratch or otherwise damage finished surfaces.

## PAINTING

09900-16

## PROJECT NOs 12170 &amp; 12181

- C. CONTRACTOR shall handle, store, transport, and dispose of all hazardous and nonhazardous project waste in strict accordance with Federal and State regulations.

## 3.11 SCHEDULE OF COLORS

- A. All colors shall be designated by the CITY during shop drawing review. The CONTRACTOR shall submit color samples to the CITY. The CONTRACTOR shall submit suitable samples of all colors (including custom colors as may be required) and finishes for the surfaces to be painted. The CITY shall decide upon the choice of colors and other finishes when alternates exist. No variation shall be made in colors without the CITY's approval. Color names and/or numbers shall be identified according to the appropriate color chart issued by the manufacturer of the particular product in question.

## 3.12 ANSI AND OSHA SAFETY COLORS

- A. Items specified in the following subsections shall be safety color coated as specified. ANSI colors shall conform with (OSHA) ANSI Z53.1 and latest revisions. Materials shall be compatible with the system specified for the equipment, concrete, etc. Where a coating system is not specified and safety colors are required, the items shall be coated with a primer and two coats of an industrial enamel. Process pipe colors shall be in accordance with the "Ten State Standard".
- B. Red: Items listed in ANSI Z53.1, Section 2.1 shall be painted ANSI Red. In general, these items shall include fire protection equipment and apparatus; wall mounted breathing apparatus, danger signs and locations; and stop bars, buttons or switches. In addition, all hose valves and riser pipes, fire protection piping and sprinkler systems, and electrical stop switches shall be painted ANSI Red.
- C. Orange: Items listed in ANSI Z53.1, Section 2.2 shall be painted ANSI Orange. ANSI Orange shall be used as a basic color for designating dangerous parts of machines or energized equipment which may cut, crush, shock, or otherwise injure and to emphasize such hazards when enclosure doors are open or when gear belt or other guards around moving equipment are open or removed, exposing unguarded hazards. In addition, moving machinery having a linear or peripheral speed in excess of 10 feet per minute, which is either inadequately guarded due to physical problems or may be operated with the guard removed, rims or sprockets, gears, pulleys, etc.; crossheads of large engines and compressors; and flywheels shall be coated ANSI Orange.
- D. Yellow: Items listed in ANSI Z53.1, Section 2.3 shall be painted ANSI Yellow. Yellow shall be the basic color for designating caution and for marking physical hazards such as striking against, stumbling, falling, tripping, and "caught in between". In addition, an 8-inch wide strip on the top and bottom tread of stairways shall be coated.
- E. Green: Items listed in ANSI Z53.1, Section 2.4 shall be painted ANSI Green. Green shall be the basic color for designating safety and the location of first-aid equipment. In general, gas masks, first-aid kits, eye wash facilities, and safety deluge showers shall be coated with ANSI Green.

## PROJECT NOs 12170 &amp; 12181

- F. Blue: Blue shall be used for designating caution, limited to warning against the starting, the use of, or the movement of equipment under repair or being worked upon.
- G. Purple: Items listed in ANSI Z53.1, Section 2.5 shall be painted ANSI Purple. In general, atomic sludge density meters shall be coated ANSI Purple.

## 3.13 CLEANING

- A. CONTRACTOR shall protect at all times, in areas where painting is being done, floors, materials of other crafts, equipment, vehicles, fixtures, and finished surfaces adjacent to paint work. Before the start of painting work, all electrical wall plates, surface hardware, nameplates, gauge glasses, etc., shall be covered.
- B. At completion of the work, remove all paint where spilled, splashed, splattered, sprayed or smeared on all surfaces, including glass, light fixtures, hardware, equipment, painted and unpainted surfaces.
- C. Work areas shall be at all times kept free from accumulation of waste material and rubbish caused by the work. At the completion of the painting, all tools, equipment, rigging, scaffolding, surplus materials, and all rubbish shall be removed and the area left clean.

- END OF SECTION -

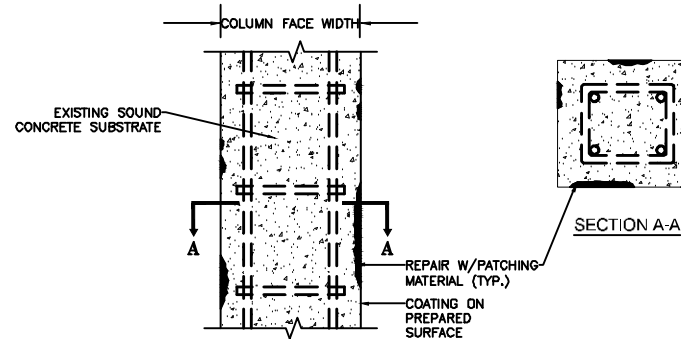
A cross-sectional diagram of a concrete repair. The diagram shows a vertical section of a concrete wall. At the top, a horizontal line with arrows at both ends is labeled "WALL THICKNESS". The main body of the diagram is divided into three horizontal layers. The top layer is labeled "EXISTING REINFORCEMENT (TYPICAL)" and contains several vertical lines representing rebar. The middle layer is labeled "EXISTING SOUND CONCRETE SUBSTRATE" and contains a stippled pattern. The bottom layer is labeled "REPAIR W/ PATCH MATERIAL" and contains a stippled pattern. On the right side, a vertical line with arrows at both ends is labeled "VOIDS & BUGHOLES FILLED W/ REPAIR EXPOXY". A horizontal line with arrows at both ends is labeled "COATING ON PREPARED SURFACE".

A cross-sectional diagram of a concrete slab and beam joint. The diagram shows a horizontal section of a slab and a vertical section of a beam. The existing concrete is represented by a stippled pattern. A dashed rectangular area indicates the repair zone. Labels include: "SLAB THICKNESS" with a vertical double-headed arrow; "EXISTING SOUND CONCRETE SUBSTRATE (SLAB & BEAM)" pointing to the original concrete; "REPAIR W/PATCH MATERIAL" pointing to the repair area on both the slab and beam; "VOIDS & BUG HOLES FILLED W/PATCHING MATERIAL" pointing to small circles within the repair area; and "COATING ON PREPARED SURFACE" pointing to a layer at the bottom of the repair zone. A note box contains the following text:

**NOTE:**

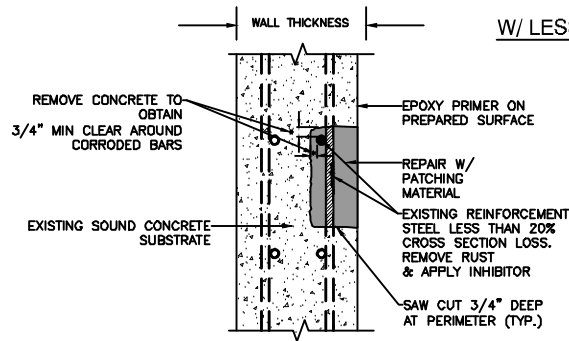
1. THIS DETAIL APPLIES TO SURFACES OF SLABS & BEAMS, INTERIOR OR EXTERIOR.

1. REMOVE ALL CONTAMINANTS, OIL, GREASE, LATANCE AND WEAK CONCRETE TO EXPOSE SUBSURFACE Voids AND TO PRODUCE A SOUND CONCRETE SUBSTRATE AND AN ADDITIONAL MECHANICAL BOND WITH ADEQUATE PROFILE AND SURFACE COARSE POROSITY OF 40 GRIT RESEMBLING ICRI CSP #4-6 COMPARATORS. SUITABLE SURFACE PREPARATION METHODS INCLUDE DRY ABRASIVE BLASTING, WET ABRASIVE BLASTING, VACUUM ASSISTED ABRASIVE BLASTING, SHOT BLASTING, SANDBLASTING OR WATERJETTING. DO NOT USE A METHOD OF SURFACE PREPARATION THAT WILL FRACTURE THE CONCRETE.
2. AREAS REQUIRING REPAIR SHOULD BE MODIFIED TO PROVIDE SIMPLE LAYOUTS AND TO PREVENT FEATHER EDGED CONDITIONS. GEOMETRY OF BOUNDARIES SHOULD MINIMIZE EDGE LENGTH.
3. APPLY APPROVED REPAIR PRODUCT FOR SURFACE LEVELING, FILLING VOIDS, BUGHOLES AND FOR GENERAL CONCRETE PATCHING. MATERIALS SHALL BE MIXED, APPLIED AND CURED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
4. APPLY APPROVED COATING ON A CLEAN AND DRY CONCRETE SURFACE ONLY. MATERIALS SHALL BE MIXED, APPLIED AND CURED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

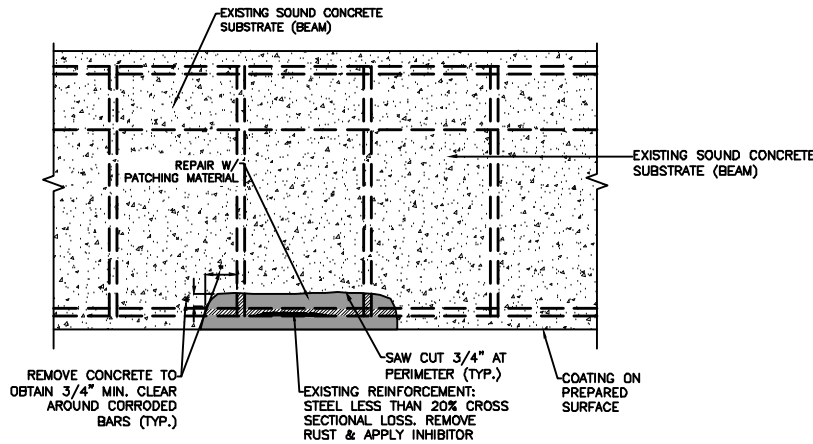


## EXHIBIT 1 - GENERAL REPAIR DETAILS

# TYPE 2 CONCRETE REPAIR FOR SURFACE DETERIORATION & REINFORCEMENT STEEL W/ LESS THAN 20% CROSS SECTION LOSS



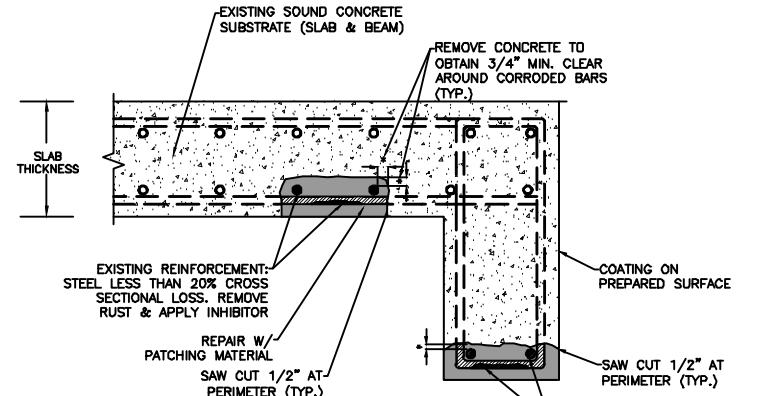
**NOTE:**  
1. THIS DETAIL APPLIES TO SURFACES OF WALLS, INTERIOR OR EXTERIOR.  
2. CONCRETE REMOVAL OF 3/4" MIN. CLEAR APPLIES TO CORRODED BARS ONLY & UN-CORRODED BARS WHEN DISTURBED.



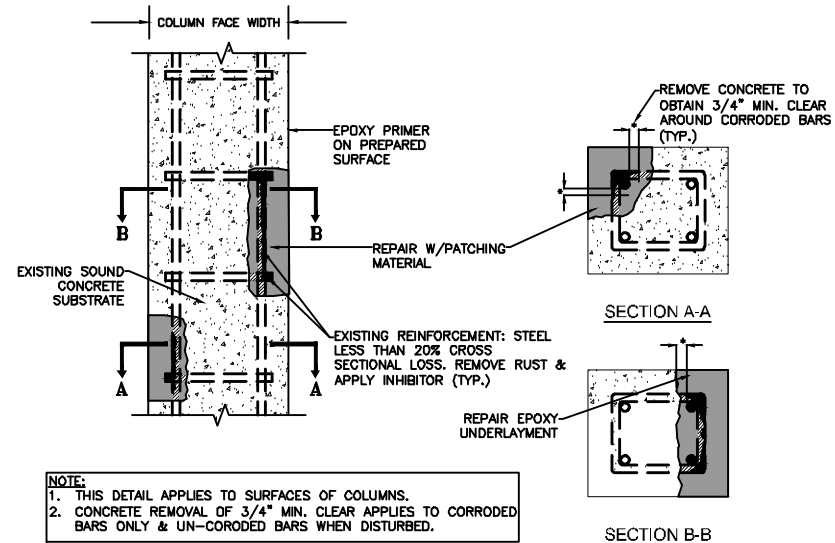
**NOTE:**  
1. THIS DETAIL APPLIES TO SURFACES OF SLAB & BEAMS, INTERIOR OR EXTERIOR.  
2. CONCRETE REMOVAL OF 3/4" MIN. CLEAR APPLIES TO CORRODED BARS ONLY & UN-CORRODED BARS WHEN DISTURBED.

## TYPE II CONCRETE REPAIR PROCEDURE — SURFACE DETERIORATION & REINFORCEMENT STEEL W/ LESS THAN 20% CROSS SECTION LOSS

1. REMOVE ALL CONTAMINANTS, OIL, GREASE, LAITANCE AND WEAK CONCRETE TO EXPOSE ANY LIGHTLY CORRODED REINFORCEMENT AND TO PRODUCE A SOUND CONCRETE SUBSTRATE. SUITABLE SURFACE PREPARATION METHODS INCLUDE DRY ABRASIVE BLASTING, WET ABRASIVE BLASTING, VACUUM ASSISTED ABRASIVE BLASTING, SHOT BLASTING, SANDBLASTING OR WATERJETTING.
2. REMOVE CONCRETE A MINIMUM OF 1/2" CLEAR FOR SLABS AND 3/4" CLEAR FOR ANY OTHER CONCRETE ELEMENTS UNDER CORRODED BAR USING HAND HELD PNEUMATIC BREAKERS. IF UNCORRODED BARS ARE EXPOSED AND DISTURBED BY THE REMOVAL PROCESS THEN THE BAR SHALL BE FULLY EXPOSED AS IF IT WERE FOUND TO BE CORRODED.
3. AREAS REQUIRING REPAIR SHOULD BE MODIFIED TO PROVIDE SIMPLE LAYOUTS AND TO PREVENT FEATHER EDGED CONDITIONS. GEOMETRY OF BOUNDARIES SHOULD MINIMIZE EDGE LENGTH. PERIMETER OF REPAIR AREA CAN BE CUT BY SAW OR OTHER METHODS APPROXIMATELY 90 DEGREE ANGLE TO SURFACE AND LESS THAN 1/2" DEEP FOR VERTICAL ELEMENTS. DO NOT CUT OR DISTURB EXISTING REINFORCEMENT.



**NOTE:**  
1. THIS DETAIL APPLIES TO SURFACES OF SLAB & BEAMS, INTERIOR OR EXTERIOR.  
2. CONCRETE REMOVAL OF 3/4" MIN. CLEAR APPLIES TO CORRODED BARS ONLY & UN-CORRODED BARS WHEN DISTURBED.



**NOTE:**  
1. THIS DETAIL APPLIES TO SURFACES OF COLUMNS.  
2. CONCRETE REMOVAL OF 3/4" MIN. CLEAR APPLIES TO CORRODED BARS ONLY & UN-CORRODED BARS WHEN DISTURBED.

4. HEAVY OXIDES, DUST, DEBRIS OR OTHER BOND INHIBITING MATERIALS MUST BE REMOVED FROM EXPOSED REINFORCEMENT AND CONCRETE USING ANY OF THE ACCEPTED SURFACE PREPARATION METHODS DESCRIBED IN POINT 1 PROVIDING ADDITIONAL MECHANICAL BOND PRIOR TO APPLICATION OF APPROVED REINFORCEMENT CORROSION INHIBITOR.
5. APPLY APPROVED REPAIRS PRODUCT FOR FILLING AFFECTED AREAS AND FOR SURFACE LEVELING. FOR APPLICATIONS GREATER THAN 1-1/2" IN THICKNESS AND WHEN REQUIRED BY MANUFACTURER, USE SSD PREPLACED AGGREGATE OR ADD UP ROUNDED, GRADED, HIGH DENSITY SSD AGGREGATE TO THE MIX. MATERIALS SHALL BE MIXED, APPLIED AND CURED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
6. APPLY APPROVED COATING ON A CLEAN AND DRY CONCRETE SURFACE ONLY. MATERIALS SHALL BE MIXED, APPLIED AND CURED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

## EXHIBIT 1 - GENERAL REPAIR DETAILS

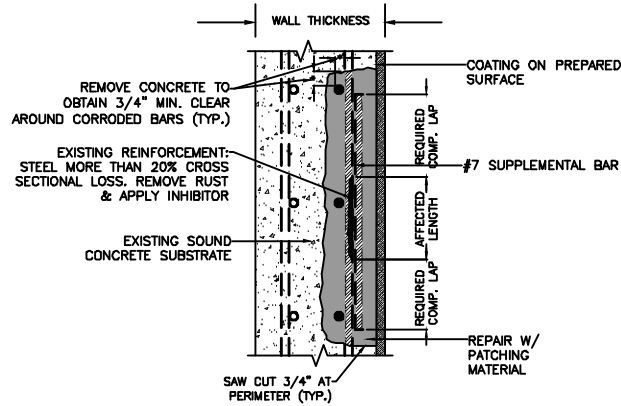
CAM #17 1080

Exhibit 3

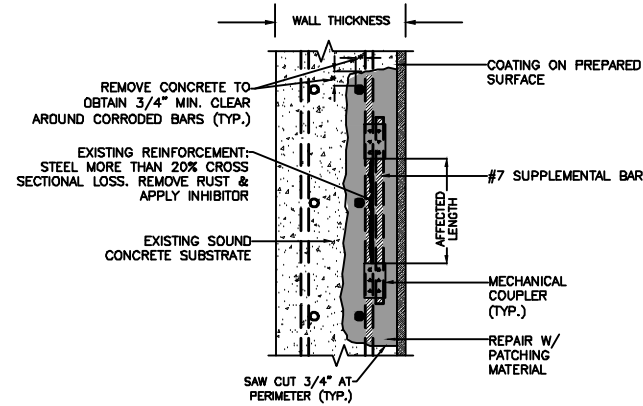
Page 217 of 271

<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>		NO.	DATE	BY	DESCRIPTION																																									<p>PROJECT # P12181 TREATMENT PLANT CONCRETE REPAIR TYPE I CONCRETE REPAIR DETAIL SECTIONS FURNACE PROJECT ADDRESS</p>
NO.	DATE	BY	DESCRIPTION																																											
<p>CITY OF FORT LAUDERDALE PUBLIC WORKS DEPARTMENT ENGINEERING &amp; ARCHITECTURE 110 North Andrews Avenue, Fort Lauderdale, Florida 33301</p>		<p>DATE: 4/5/2017 DRAWN BY: AC CHECKED BY: SH APPROVED BY: SH FILED NO.: 8/25/2017 40:5</p>																																												
<p>SYMBOL NO. 52</p>		<p>TOTAL: 12181-MULTI-DET DRAWING FILE NO. 4-XXX-XX</p>																																												

**TYPE 3 CONCRETE REPAIR  
FOR SURFACE DETERIORATION  
& REINFORCEMENT STEEL  
W/ MORE THAN 20% CROSS SECTION LOSS**



**NOTE:**  
1. THIS DETAIL APPLIES TO SURFACES OF WALLS INTERIOR OR EXTERIOR.  
2. CONCRETE REMOVAL OF 3/4" MIN. CLEAR APPLIES TO CORRODED BARS ONLY & UN-CORRODED BARS WHEN DISTURBED.



**NOTE:**  
1. THIS DETAIL APPLIES TO SURFACES OF WALLS INTERIOR OR EXTERIOR.  
2. CONCRETE REMOVAL OF 3/4" MIN. CLEAR APPLIES TO CORRODED BARS ONLY & UN-CORRODED BARS WHEN DISTURBED.

**TYPE III CONCRETE REPAIR PROCEDURE – SURFACE DETERIORATION & REINFORCEMENT STEEL W/ MORE THAN 20% CROSS SECTION LOSS**

1. REMOVE ALL CONTAMINANTS, OIL, GREASE, LATANCE AND WEAK CONCRETE TO EXPOSE ANY HEAVILY CORRODED REINFORCEMENT AND TO PRODUCE A SOUND CONCRETE SUBSTRATE. SUITABLE SURFACE PREPARATION METHODS INCLUDE DRY ABRASIVE BLASTING, WET ABRASIVE BLASTING, VACUUM ASSISTED ABRASIVE BLASTING, SHOT BLASTING, SANDBLASTING OR WATERJETTING.
2. REMOVE CONCRETE A MINIMUM OF 3/4" CLEAR UNDER CORRODED BAR USING HAND HELD PNEUMATIC BREAKERS. IF UNCORRODED BARS ARE EXPOSED AND DISTURBED BY THE REMOVAL PROCESS THEN THE BAR SHALL BE FULLY EXPOSED AS IF IT WERE FOUND TO BE CORRODED.
3. AREAS REQUIRING REPAIR SHOULD BE MODIFIED TO PROVIDE SIMPLE LAYOUTS AND TO PREVENT FEATHER EDGED CONDITIONS. GEOMETRY OF BOUNDARIES SHOULD MINIMIZE EDGE LENGTH. PERIMETER OF REPAIR AREA CAN BE CUT BY SAW OR OTHER METHODS APPROXIMATELY 90 DEGREE ANGLE TO SURFACE AND LESS THAN 1/2" DEEP FOR VERTICAL ELEMENTS. DO NOT DISTURB EXISTING REINFORCEMENT.
4. HEAVY OXIDES, DUST, DEBRIS OR OTHER BOND INHIBITING MATERIALS MUST BE REMOVED FROM EXPOSED REINFORCEMENT AND CONCRETE USING ANY OF THE ACCEPTED SURFACE PREPARATION METHODS DESCRIBED IN POINT 1 PROVIDING ADDITIONAL MECHANICAL BOND PRIOR TO APPLICATION OF APPROVED REINFORCEMENT CORROSION INHIBITOR.
5. PLACE SUPPLEMENTAL BAR COVERING PARALLEL TO THE AFFECTED LENGTH OF THE EXISTING CORRODED BAR PLUS THE REQUIRED LAP SPLICE AT EACH END. USE OF MECHANICAL SPLICE IS ACCEPTED.
6. APPLY APPROVED UNDERLAYMENT PRODUCT FOR FILLING AFFECTED AREAS AND FOR SURFACE LEVELING. FOR APPLICATIONS GREATER THAN 1-1/2" IN THICKNESS AND WHEN REQUIRED BY MANUFACTURER, USE SSD PREPLACED AGGREGATE OR ADD UP ROUNDED, GRADED, HIGH DENSITY SSD AGGREGATE TO THE MIX. MATERIALS SHALL BE MIXED, APPLIED AND CURED IN STRICT

- ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
7. APPLY APPROVED EPOXY PRIMER ON A CLEAN AND DRY CONCRETE SURFACE ONLY. MATERIALS SHALL BE MIXED, APPLIED AND CURED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
  8. APPROVED EPOXY LINING PROTECTIVE COATING SHALL BE APPLIED AND CURED ON THE PROPERLY PREPARED SURFACE IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. SURFACE MUST BE FREE OF DIRT, OIL AND BLUSHING PRIOR TO APPLICATION.
  9. PERFORM SPARK TESTING TO CHECK FOR VOIDS AND DEFECTS IN LINING PROTECTIVE COATING AFTER A MINIMUM OF 24 HOUR CURE. REPAIR DEFECTS FOLLOWING MANUFACTURER'S RECOMMENDATIONS.

**EXHIBIT 1 - GENERAL REPAIR DETAILS**

CAM #17 1080

Exhibit 3  
Page 218 of 271

<p><b>CITY OF FORT LAUDERDALE</b> PUBLIC WORKS DEPARTMENT ENGINEERING &amp; ARCHITECTURE 100 North Andrews Avenue, Fort Lauderdale, Florida 33301</p>																							
<p>PROJECT # P12181 TREATMENT PLANT CONCRETE REPAIR TYPE I CONCRETE REPAIR DETAIL SECTIONS PAVEMENT PROJECT ADDRESS</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2">REVISIONS</th> </tr> <tr> <th>NO.</th> <th>DESCRIPTION</th> </tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>	REVISIONS		NO.	DESCRIPTION																		
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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"> <p>DATE: 4/5/2017</p> <p>DESIGNED BY: AC</p> <p>CHECKED BY: SH</p> <p>IN CHARGE: SH</p> <p>FIELD NO.:  </p> </td> <td style="width: 80%;"> <p>PROJECT # P12181</p> <p>DATE: 4/5/2017</p> <p>DESIGNED BY: AC</p> <p>CHECKED BY: SH</p> <p>IN CHARGE: SH</p> <p>FIELD NO.:  </p> </td> </tr> </table>		<p>DATE: 4/5/2017</p> <p>DESIGNED BY: AC</p> <p>CHECKED BY: SH</p> <p>IN CHARGE: SH</p> <p>FIELD NO.:  </p>	<p>PROJECT # P12181</p> <p>DATE: 4/5/2017</p> <p>DESIGNED BY: AC</p> <p>CHECKED BY: SH</p> <p>IN CHARGE: SH</p> <p>FIELD NO.:  </p>																				
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<p style="text-align: center;">SHEET NO. 33 OF 40</p> <p style="text-align: center;">TOTAL: 12181-MULTI-DET</p> <p style="text-align: center;">DRAWING FILE NO. 1252101740-5</p> <p style="text-align: center;">4-XXX-XX</p>																							

TENSION LAP SPLICE (1.3 Ld)																	
BAR SIZE	TYPE	CONCRETE STRENGTH (PSI)															
		3000				4000				5000				6000			
		A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
#3	O	23"	33"	20"	29"	17"	26"	16"	24"	15"	23"	15"	20"	13"	20"	12"	19"
	T	29"	43"	25"	37"	23"	33"	21"	30"	19"	28"	19"	28"	17"	25"	16"	24"
#4	O	29"	43"	25"	38"	23"	34"	21"	30"	20"	29"	19"	28"	17"	25"	16"	24"
	T	38"	56"	33"	50"	30"	45"	28"	39"	25"	37"	24"	34"	23"	33"	21"	32"
#5	O	37"	55"	32"	47"	29"	42"	26"	38"	24"	36"	23"	33"	21"	32"	20"	30"
	T	47"	71"	41"	62"	37"	55"	34"	50"	32"	46"	28"	43"	28"	41"	28"	39"
#6	O	43"	65"	38"	56"	34"	51"	28"	46"	29"	43"	28"	39"	25"	38"	24"	36"
	T	56"	85"	50"	73"	45"	65"	36"	59"	37"	55"	36"	51"	33"	49"	32"	47"
#7	O	64"	94"	54"	81"	46"	73"	45"	58"	42"	63"	38"	57"	37"	55"	35"	52"
	T	107"	123"	71"	106"	63"	95"	59"	76"	54"	81"	51"	75"	47"	71"	46"	68"
#8	O	72"	107"	62"	93"	55"	84"	51"	76"	47"	71"	45"	65"	42"	63"	39"	59"
	T	94"	140"	81"	121"	72"	110"	67"	99"	62"	91"	58"	85"	55"	81"	51"	77"
#9	O	81"	121"	69"	105"	62"	94"	58"	86"	54"	84"	50"	74"	47"	71"	44"	66"
	T	106"	158"	90"	137"	81"	123"	78"	112"	69"	103"	65"	97"	62"	91"	58"	86"
#10	O	91"	136"	78"	118"	70"	106"	65"	96"	60"	90"	57"	88"	54"	80"	50"	75"
	T	119"	177"	102"	154"	91"	138"	85"	125"	78"	116"	75"	108"	69"	103"	65"	98"
#11	O	101"	151"	87"	131"	77"	118"	72"	107"	67"	99"	63"	92"	59"	88"	53"	83"
	T	132"	197"	114"	171"	101"	154"	94"	140"	86"	129"	82"	120"	76"	114"	72"	108"
#14																	
#18		SEE NOTE #8															

TENSION DEVELOPMENT LENGTH, Ld																	
BAR SIZE	TYPE	CONCRETE STRENGTH (PSI)															
		3000				4000				5000				6000			
		A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
#3	O	17"	25"	15"	22"	13"	20"	12"	18"	11"	17"	11"	16"	10"	15"	9"	14"
	T	22"	33"	19"	28"	17"	26"	16"	23"	14"	21"	14"	20"	13"	19"	12"	18"
#4	O	22"	33"	19"	29"	17"	26"	16"	23"	15"	22"	14"	20"	13"	19"	12"	18"
	T	29"	43"	25"	38"	23"	34"	21"	30"	19"	28"	19"	28"	17"	25"	16"	24"
#5	O	28"	42"	24"	36"	22"	32"	20"	29"	18"	27"	17"	26"	16"	24"	15"	23"
	T	36"	54"	31"	47"	28"	42"	26"	38"	24"	36"	22"	33"	21"	31"	20"	30"
#6	O	33"	50"	29"	43"	26"	39"	21"	36"	22"	33"	21"	30"	19"	29"	18"	27"
	T	43"	65"	38"	56"	34"	50"	27"	45"	28"	42"	27"	39"	25"	37"	24"	36"
#7	O	49"	72"	42"	63"	37"	56"	35"	45"	32"	48"	30"	44"	28"	42"	27"	40"
	T	63"	94"	54"	81"	48"	73"	45"	58"	41"	62"	39"	57"	36"	54"	35"	52"
#8	O	55"	82"	47"	71"	42"	64"	39"	58"	36"	54"	34"	50"	32"	48"	30"	45"
	T	72"	107"	62"	93"	55"	84"	51"	76"	47"	70"	45"	65"	42"	62"	39"	59"
#9	O	63"	93"	54"	81"	48"	73"	44"	68"	41"	61"	39"	57"	36"	54"	34"	51"
	T	81"	121"	69"	105"	62"	94"	58"	86"	53"	78"	50"	74"	47"	70"	44"	66"
#10	O	70"	105"	60"	91"	54"	82"	50"	74"	46"	69"	44"	64"	41"	61"	39"	58"
	T	91"	136"	78"	118"	70"	106"	65"	96"	60"	89"	57"	83"	53"	79"	50"	75"
#11	O	76"	116"	67"	101"	60"	91"	55"	82"	51"	76"	48"	71"	45"	67"	43"	64"
	T	101"	151"	87"	131"	77"	118"	72"	107"	66"	99"	63"	92"	58"	87"	55"	83"
#14	O	94"	139"	80"	121"	72"	109"	67"	99"	61"	92"	58"	85"	54"	81"	51"	77"
	T	122"	181"	104"	157"	93"	141"	86"	128"	79"	119"	75"	111"	70"	105"	67"	100"
#18	O	125"	186"	107"	161"	95"	145"	89"	131"	81"	122"	77"	113"	72"	108"	68"	102"
	T	162"	241"	136"	209"	124"	188"	115"	171"	106"	158"	100"	147"	93"	140"	89"	133"

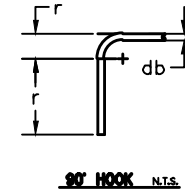
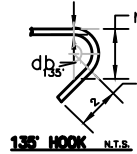
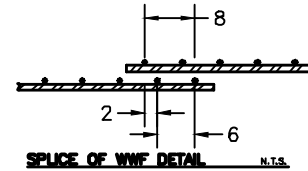
NOTES:

- TABULATED VALUES ARE FOR GRADE 60 REINFORCING BARS AND NORMAL WEIGHT CONCRETE.
- "T" INDICATES TOP BARS WHICH ARE HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE CASE BELOW THEM.
- "O" INDICATES OTHER BARS.
- CASE A:
  - FOR BEAMS OR COLUMNS:
    - COVER IS AT LEAST 1.0 DB
    - CENTER TO CENTER SPACING IS AT LEAST 2.0 DB.
    - MINIMUM AMOUNT OF STIRRUPS FOR BEAMS AND TIES FOR COLUMNS.
  - FOR ALL OTHERS:
    - COVER IS AT LEAST 1.0 DB.
    - CENTER TO CENTER SPACING IS AT LEAST 3.0 DB.
- CASE B:
  - FOR BEAMS OR COLUMNS:
    - COVER IS LESS THAN 1.0 DB OR CENTER TO CENTER SPACING IS LESS THAN 2.0 DB.
  - FOR LIGHT WEIGHT AGGREGATE CONCRETE, MULTIPLY THE TABULATED VALUES BY 1.3.
  - USE CASE A U.O.N.
  - LAP SPLICES NOT PERMITTED, USE WELDED SPLICES OR MECHANICAL CONNECTION.

DEVELOPMENT LENGTH Ld (INCHES) OF STANDARD HOOKS											
BAR NO.	Fe (NORMAL WEIGHT CONCRETE), PSI										
	3000	4000	5000	6000	7000	8000	9000	10000			
3	9"	8"	7"	6"	6"	6"	6"	6"			
4	11"	10"	9"	8"	8"	7"	7"	6"			
5	14"	12"	11"	10"	9"	9"	8"	8"			
6	17"	15"	13"	12"	11"	11"	10"	9"			
7	20"	17"	15"	14"	13"	12"	12"	11"			
8	22"	19"	17"	16"	15"	14"	13"	12"			
9	25"	22"	20"	18"	17"	16"	15"	14"			
10	28"	25"	22"	20"	19"	17"	17"	16"			
11	31"	27"	24"	22"	21"	19"	18"	17"			
14	36"	33"	29"	27"	25"	23"	22"	21"			
18	50"	43"	39"	35"	33"	31"	29"	28"			

COMPRESSION LAP SPLICE		
BAR SIZE	CONCRETE STRENGTH, PSI	
	LESS THAN 3000	3000 & MORE
3	15"	12"
4	20"	15"
5	25"	19"
6	30"	23"
7	35"	27"
8	40"	30"
9	46"	34"
10	51"	39"
11	57"	43"
14	68"	51"
18	91"	68"

COMPRESSION DEVELOPMENT LENGTH Ldc				
BAR SIZE	CONCRETE STRENGTH, PSI			
	3000	4000	5000 & MORE	
3	9"	8"	8"	
4	11"	10"	9"	
5	14"	12"	12"	
6	17"	15"	14"	
7	20"	17"	16"	
8	22"	19"	18"	
9	25"	22"	21"	
10	28"	25"	23"	
11	31"	27"	26"	
14	36"	33"	31"	
18	50"	43"	41"	



BEND RADIUS OF STANDARD HOOKS FOR STIRRUPS AND TIE REINFORCEMENT			
BAR SIZE	r	r <sub>1</sub>	r <sub>2</sub>
3	1.125"	2.25"	2.25"
4	1.5"	3.0"	3.0"
5	1.875"	3.75"	3.75"
6	3.0"	9.0"	4.5"
7	3.5"	10.5"	5.25"
8	4.0"	12.0"	6.0"

REVISIONS

NO.	DATE	BY	DESCRIPTION

PROJECT # P12181  
TREATMENT PLANT CONCRETE REPAIR  
TYPE I CONCRETE REPAIR  
DETAIL SECTIONS  
FURNACE PROJECT ADDRESS

SHEET NO. 34 OF 40

CAD FILE: 12181-MULTI-DET  
DRAWING FILE NO. 4-XXX-XX

CITY OF FORT LAUDERDALE  
PUBLIC WORKS DEPARTMENT  
ENGINEERING & ARCHITECTURE  
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

DATE: 4/9/2017  
AC: [blank]  
CHECKED BY: [blank]  
FIELD NO.: [blank]

EXHIBIT 1 - GENERAL REPAIR DETAILS

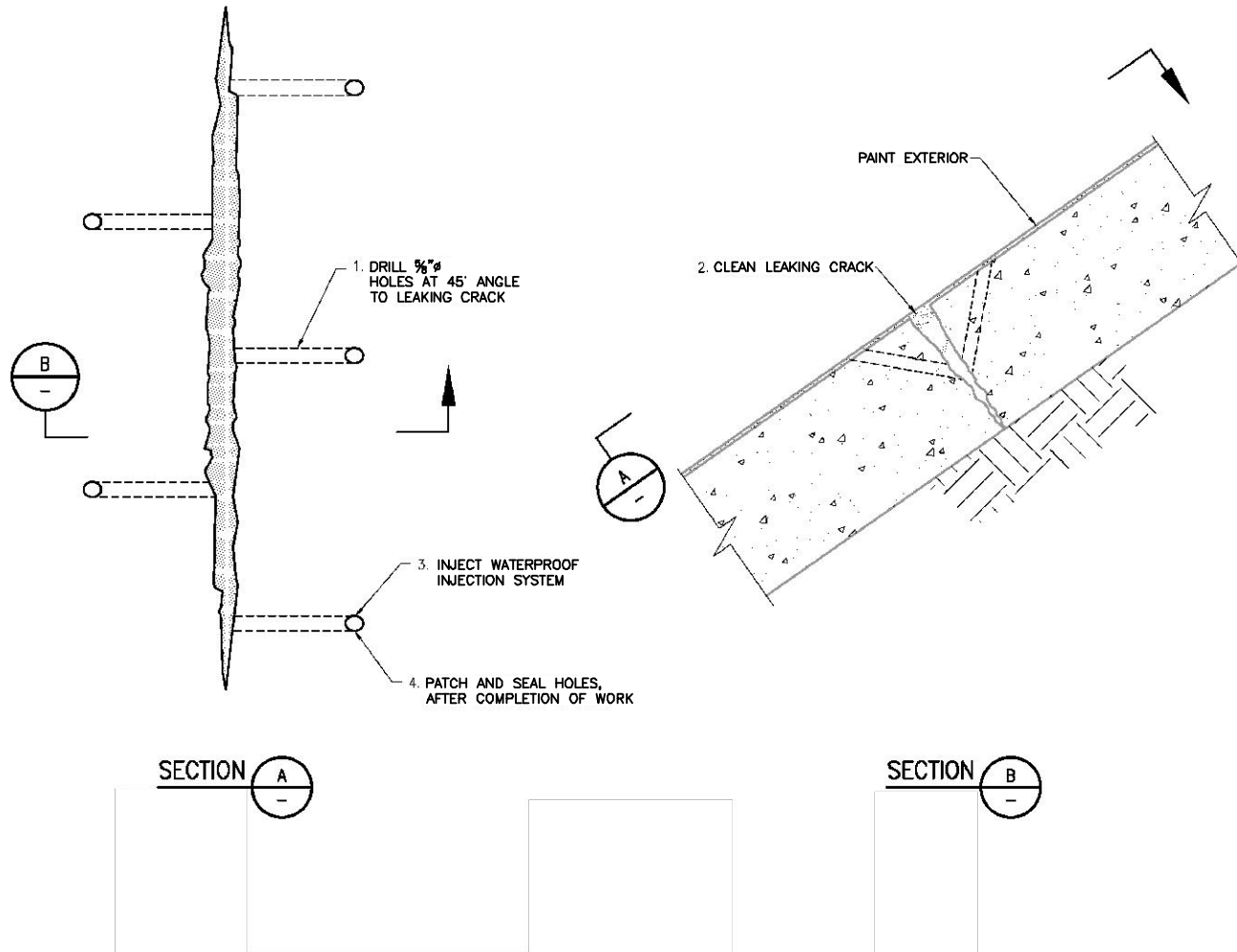


EXHIBIT 1 - GENERAL REPAIR DETAILS

CAM #17-1080

Exhibit 3

Page 220 of 271

SECRET NO.	OF
35	40
TOTAL:	
CAD FILE:	12181-MULTI-DET
DRAWING FILE NO.	4-XXX-XX

PROJECT #	P12181
TREATMENT PLANT	CONCRETE REPAIR
TYPE I	CONCRETE REPAIR
DETAIL SECTIONS	
PAVCE	PROJECT ADDRESS

REVISIONS			DESCRIPTION
NO.	DATE	BY	DESCRIPTION

CITY OF FORT LAUDERDALE	
PUBLIC WORKS DEPARTMENT	
ENGINEERING & ARCHITECTURE	
1100 North Andrews Avenue, Fort Lauderdale, Florida 33301	

DATE	4/5/2017
AC	SH
SH	SH
SH	SH
SH	SH

PROJECT	673-11973
DATE	4/5/2017
AC	SH
SH	SH
SH	SH
SH	SH



**Exhibit 2****Fiveash Water Treatment Plant - Representative Photographs with Repair Scope****Concrete Repair Type 1**

**Repair concrete divot and restore area to match surroundings.**



**Repair concrete divot and restore area to match surroundings.**



**Replace chipped out concrete and reattach walkway support. Restore damaged areas to match surroundings.**



**Repair pipe support (view 1).**



**Repair pipe support (view 2).**



**Replace corner and reattach handrail support. Restore damaged areas to match surroundings.**

**Exhibit 2****Fiveash Water Treatment Plant - Representative Photographs with Repair Scope****Concrete Repair Type 2**

Remove and replace damaged concrete, treat exposed rebar with rust inhibitor and restore and paint damaged areas to match surroundings.



Repair damaged concrete and exposed rebar and finish damaged areas to match surroundings.



Repair damaged concrete and exposed rebar and finish damaged areas to match surroundings.



Repair concrete door jamb and finish damaged areas to match surroundings (view 1).



Repair concrete door jamb and finish damaged areas to match surroundings (view 2).



**Exhibit 2****Fiveash Water Treatment Plant - Representative Photographs with Repair Scope****Leak Repair**

Remove efflorescence and any unsound concrete, treat any exposed reinforcement, stop all leaks and finish and paint to match the surrounding area (view 1).



Remove efflorescence and any unsound concrete, treat any exposed reinforcement, stop all leaks and finish and paint to match the surrounding area (view 2).



Remove efflorescence and any unsound concrete, treat any exposed reinforcement, stop all leaks and finish and paint to match the surrounding area (view 3).



Remove efflorescence and any unsound concrete, treat any exposed reinforcement, stop all leaks and finish to match the surrounding area (view 1).



Remove efflorescence and any unsound concrete, treat any exposed reinforcement, stop all leaks and finish to match the surrounding area (view 2).



Remove efflorescence and any unsound concrete, treat any exposed reinforcement, stop all leaks and finish to match the surrounding area (view 3).



**Exhibit 2****Fiveash Water Treatment Plant - Representative Photographs with Repair Scope  
Leak Repair**

**Remove efflorescence and any unsound concrete, treat any exposed reinforcement, stop all leaks and finish and paint to match the surrounding area.**



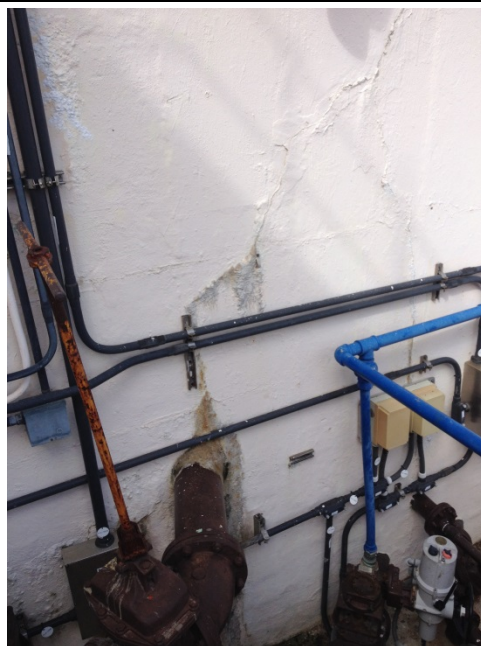
**Remove efflorescence and any unsound concrete, treat any exposed reinforcement, stop all leaks and finish and paint to match the surrounding area**



**Remove efflorescence and any unsound concrete, treat any exposed reinforcement, stop all leaks and finish and paint to match the surrounding area**



**Remove efflorescence and any unsound concrete, treat any exposed reinforcement, stop all leaks and finish and paint to match the surrounding area**



**Remove efflorescence and any unsound concrete, treat any exposed reinforcement, stop all leaks and finish and paint to match the surrounding area**



**Remove efflorescence and any unsound concrete, treat any exposed reinforcement, stop all leaks and finish and paint to match the surrounding area**

**Exhibit 2****Fiveash Water Treatment Plant - Representative Photographs with Repair Scope  
Crack Repair**

**Remove any unsound concrete, treat any exposed reinforcement, and finish and paint to match the surrounding area.**



**Remove any unsound concrete, treat any exposed reinforcement and finish and paint to match the surrounding area.**



**Remove any unsound concrete, treat any exposed reinforcement and finish and paint to match the surrounding area.**



**Exhibit 2****Fiveash Water Treatment Plant - Representative Photographs with Repair Scope****Expansion Joint Replacement****Replace expansion joint****Replace expansion joint****Replace expansion joint****Replace expansion joint****Replace expansion joint around curb  
(repair of the curb is listed in another category).****Replace expansion joint between  
fluted block wall and concrete slab.**



**Exhibit 2****Fiveash Water Treatment Plant - Representative Photographs with Repair Scope****Stucco Repair**

**Replace unsound stucco area (view 1).**



**Replace unsound stucco area (view 2).**



**Repair unsound stucco area.**



**Replace unsound stucco area.**



**Remove plaster between beams, clean up the joint and finish and paint to match surrounding area (view 1).**

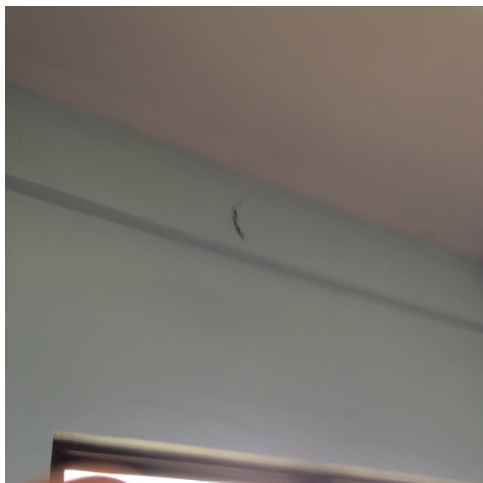


**Remove plaster between beams, clean up the joint and finish and paint to match surrounding area (view 2).**

## Exhibit 2

### Fiveash Water Treatment Plant - Representative Photographs with Repair Scope

#### Stucco Repair



Remove damaged plaster, patch the damaged area, refinish the area and paint to match the surrounding area. (Note: adjacent similar spots are not apparent in this photo).

#### Louver Replacement



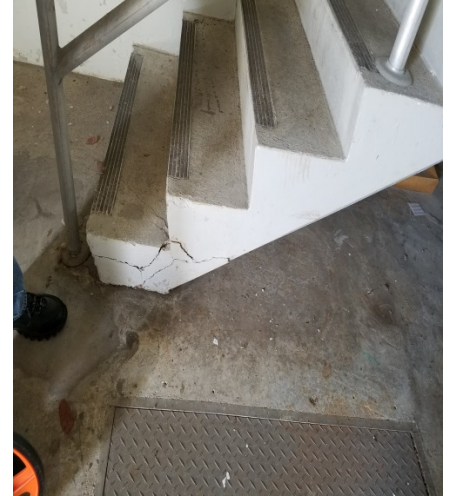
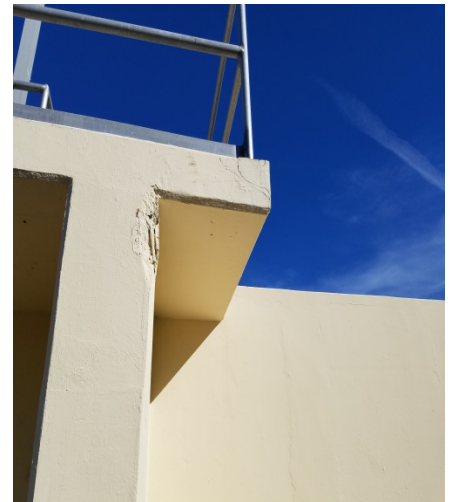
Remove louver and unsound concrete, install a neoprene pad around the pipe, reform the space to fit a new louver and restore the area to match surroundings (view 1).



Remove louver and unsound concrete, install a neoprene pad around the pipe, reform the space to fit a new louver and restore the area to match surroundings (view 1).

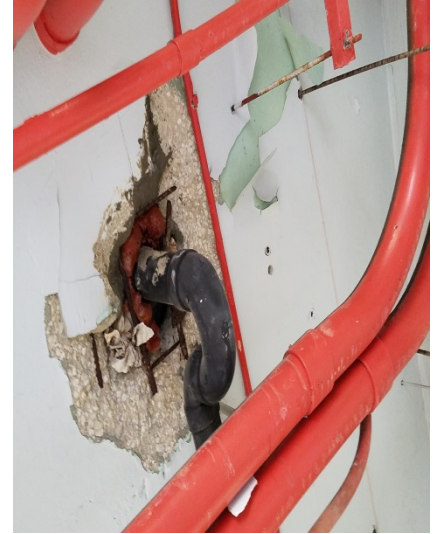


**Exhibit 2****Fiveash Water Treatment Plant - Representative Photographs with Repair Scope  
Flashing Installation****Install flashing on top of parapet****Concrete Slab Replacement****Replace lift station slab in kind****Replace slab in kind**

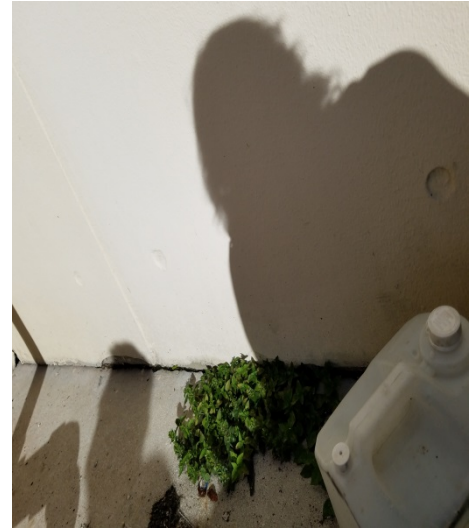
**Exhibit 3****George T. Lohmeyer Wastewater Treatment Plant – Representative Photographs with Repair Scope****Concrete Repair Type 1****Repair Cracked Beam****Repair Spalled Concrete****Repair Cracked Stairs****Repair Cracked Pedestal****Repair Chipped Stair****Repair Cracked and Spalling Concrete**



**Exhibit 3****George T. Lohmeyer Wastewater Treatment Plant – Representative Photographs with Repair Scope  
Concrete Repair Type 1****Repair Pipe Support****Repair Pipe Supports****Repair Pedestal****Repair Spalled Concrete****Repair Exterior Stairwell****Repair cracked pillar**

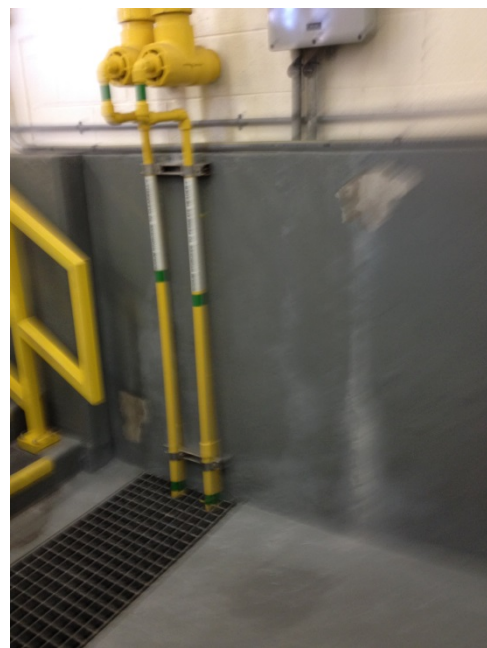
**Exhibit 3****George T. Lohmeyer Wastewater Treatment Plant – Representative Photographs with Repair Scope****Concrete Repair Type 2****Spalling to Rebar Around Hatch****Spalling to Rebar Near Support****Spalling Around Piping in Ceiling****Repair Walkway****Spalling to Rebar****Deteriorated Ceiling Beams**



**Exhibit 3****George T. Lohmeyer Wastewater Treatment Plant – Representative Photographs with Repair Scope****Concrete Repair Crack Repair****Crack Repair****Crack Repair****Crack Repair**

**Exhibit 3****George T. Lohmeyer Wastewater Treatment Plant – Representative Photographs with Repair Scope  
Leak Repair****Leaking Pipe Penetrations**

**Exhibit 3****George T. Lohmeyer Wastewater Treatment Plant – Representative Photographs with Repair Scope  
Remove and Replace Posts****Remove and Replace Post****Remove and Replace Posts**

**Exhibit 4****Peele-Dixie Water Treatment Plant - Representative Photographs with Repair Scope****Leaking Crack Repair**

**Remove unsound concrete, stop the leak, restore and repaint damaged areas to match surrounding area.**



**Remove unsound concrete, stop the leak, restore and repaint damaged areas to match surrounding area.**



**Repair leaking window, refinish damaged areas to match surrounding areas.**



**Exhibit 4****Peele-Dixie Water Treatment Plant - Representative Photographs with Repair Scope****Stucco Repair**

**Remove and replace unsound stucco and paint to match surrounding area.**



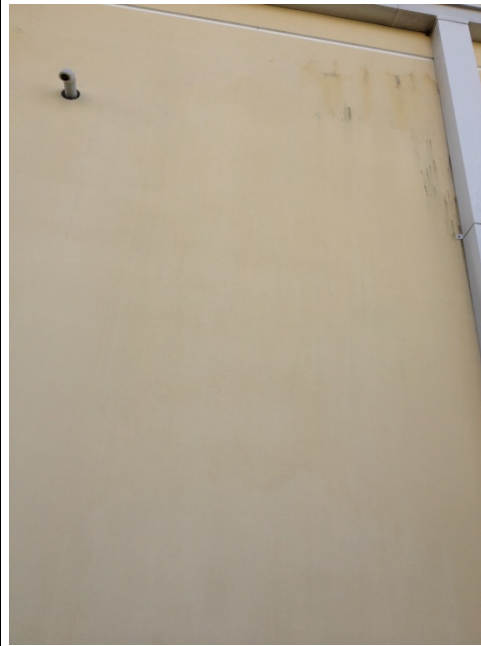
**Remove and replace unsound stucco and paint to match surrounding area.**



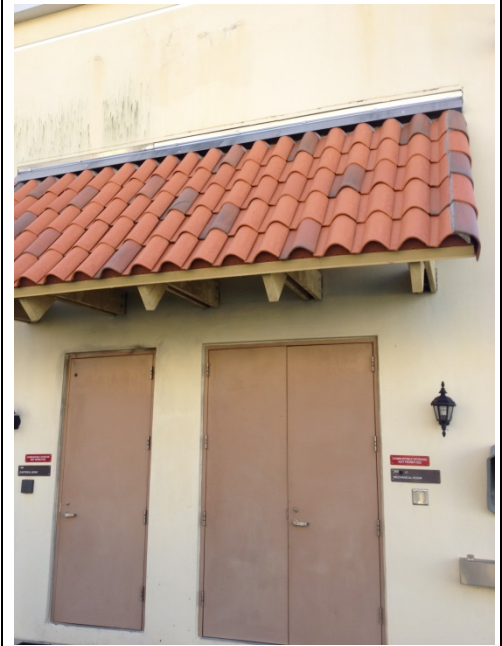
**Remove and replace unsound stucco and paint to match surrounding area.**



**Remove and replace unsound stucco and paint to match surrounding area.**



**Remove and replace unsound stucco and paint to match surrounding area.**



**Remove and replace unsound stucco and paint to match surrounding area.**



**Exhibit 4****Peele-Dixie Water Treatment Plant - Representative Photographs with Repair Scope****Stucco Repair**

**Remove and replace unsound stucco and paint to match surrounding area.**



**Remove and replace unsound stucco and paint to match surrounding area.**



**Remove and replace unsound stucco and paint to match surrounding area.**



**Remove and replace unsound stucco and paint to match surrounding area.**



**Remove and replace unsound stucco and paint to match surrounding area.**



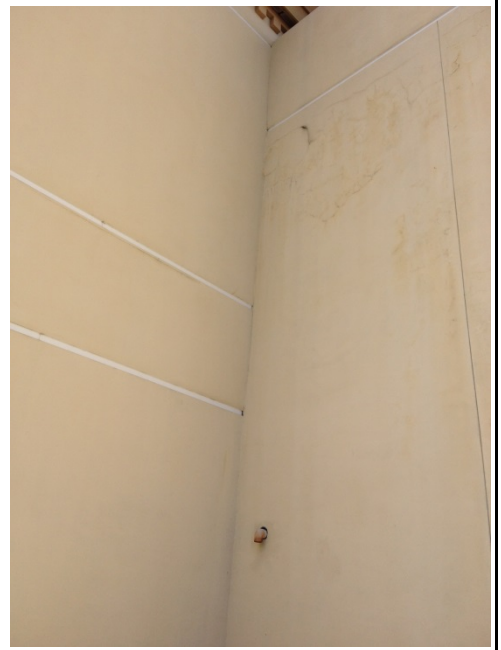
**Remove and replace unsound stucco and paint to match surrounding area.**

**Exhibit 4****Peele-Dixie Water Treatment Plant - Representative Photographs with Repair Scope****Stucco Repair**

**Remove and replace unsound stucco and paint to match surrounding area.**



**Remove and replace unsound stucco and paint to match surrounding area.**



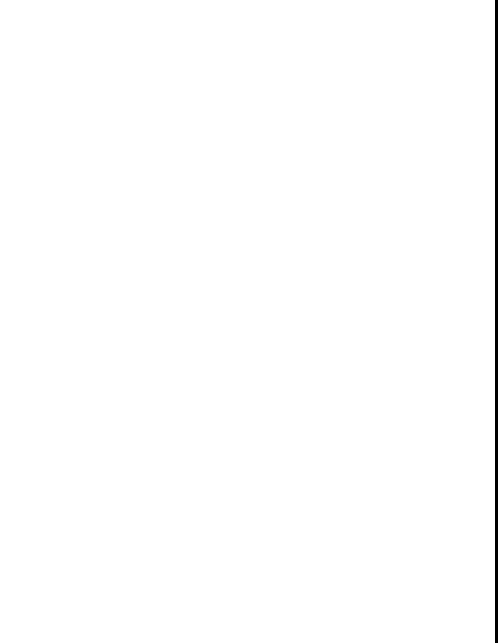
**Remove and replace unsound stucco and paint to match surrounding area.**



**Remove and replace unsound stucco and paint to match surrounding area.**



**Remove and replace unsound stucco and paint to match surrounding area.**





4Verification	Originator	Approved	Issued
Initials	<b>SMP</b>	<b>ST</b>	<b>ST</b>
Date	<b>9/26/2014</b>	<b>12/15/2014</b>	<b>12/15/2014</b>

The following information is required by the Contractor prior to contracted activity or service.

Will the contracted activity or service include any of the following? Combustion Sources such as:

**Check Yes or No to all questions**

Air and Heating Supply	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Mobile Transportation, such as forklift or carts	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Construction Activities	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Excavation or Grading	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Drilling or Blasting	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Rock Crushing	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Demolition	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Welding or Soldering	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Painting	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Asphalt Paving	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Use or Storage of Chemicals, Fluids or Fuels	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Transfer of Bulk Materials	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Disposal of Chemical Wastes	<input type="checkbox"/> Yes	<input type="checkbox"/> No
High Voltage	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Liquid Oxygen	<input type="checkbox"/> Yes	<input type="checkbox"/> No
General Waste	<input type="checkbox"/> Yes	<input type="checkbox"/> No

If yes, please describe waste streams:

Building Maintenance Activities:

Architectural Paint Removal	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Architectural Painting	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Hydroblasting	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Sandblasting	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Surface Preparation / Treatments, such as floors and roof repair	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Demolition	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Purging or repair of distribution lines such as those for fuel, oil, or solvents	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Use of chemicals, solvents, caustics, acids, oils, etc.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Use of herbicides, pesticides, or insecticides	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Impact storm water system	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Business or Work Related Activities:

**Check Yes or No to all questions**

Use or receipt of chemical materials (other than janitorial or cleaning materials.)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Generation and disposal of chemical wastes	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Generation of sealers, adhesives, coatings, or paints	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Welding, soldering, brazing or similar activities	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Use of caustics or acids	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Use of combustion gases	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Disposal of retired equipment	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Business or Work Related Activities:

**Check Yes or No to all questions**

Please list fuels used:

Laboratory Installation	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Medical Waste	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Discharge to storm drains	<input type="checkbox"/> Yes	<input type="checkbox"/> No

To be completed by the City of Fort Lauderdale - Contract Administrator prior to the contracted work or service.

A review of the above activities determined:

☐ This **Checklist** form (ED-4.4.6-3(F)) is approved, no further action is needed.

☐ This **Checklist** form (ED-4.4.6-4(F)) must be completed by the contractor/supplier.

Contract Administrator

Signature: \_\_\_\_\_

\_\_\_\_\_

Date: \_\_\_\_\_

Checklist reviewed

by: \_\_\_\_\_

Regional Wastewater Facility

Manager

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Refer to **EP-4.4.6-2 Contractor Management Procedure** for information regarding the use, routing and approval of this form.

Verification	Originator	Approved	Issued
Initials	MRA	ST	ST
Date	5/29/14	12/15/2014	12/15/2014

**Person(s) responsible: Regional Wastewater Facility Manager**

**Area of application:** George T Lohmeyer Wastewater Treatment Plant (GTL)

**Document location:** [www.fortlauderdale.gov/ESMS](http://www.fortlauderdale.gov/ESMS)

#### Revisions

Rev. No.	Date	Description
001	8/7/15	Minor updates to document.
002	8/18/15	Added "Or equivalent contractor document" to section 2.5 (spill report)
003	7/19/16	Revised contact phone number and added the word "designee" to Regional Wastewater Facility Manager sign-off

#### Requirements

- 1.0 Introduction
- 2.0 General Environmental Management Procedures
- 3.0 Waste Disposal
- 4.0 Equipment Decommissioning
- 5.0 Water Discharges
- 6.0 Material Storage/Spills
- 7.0 Storm Water Management
- 8.0 PCBs
- 9.0 Asbestos
- 10.0 Lead
- 11.0 CFCs
- 12.0 Contractor Environmental Activity Review

#### APP City of Fort Lauderdale Environmental Policy

##### 1.0 Introduction

- 1.1 The following information is supplied to contractors and suppliers who perform work on site for the City of Fort Lauderdale at GTL. The information presented in these guidelines has been developed in response to the Environmental Sustainable Management System (ESMS). The intent of this information is to make contractors and suppliers aware of the ESMS and to ensure conformance to applicable ESMS procedures and work instructions.
- 1.2 An important part of the ESMS relates to the control of contractors, subcontractors and persons working for or on behalf of the City of Fort Lauderdale at GTL, who are required to comply with relevant environmental policies and procedures. The nature of these activities is such that their personnel have significant potential to affect environmental performance and regulatory compliance within the City of Fort Lauderdale at GTL. Contractor personnel and the City's personnel therefore must work together to achieve the goals of the environmental policy, objectives and targets and the protection of the environment. Contractors must be aware of the importance of compliance with relevant environmental legislation and regulations, and of the consequences of non-compliance.
- 1.3 The City of Fort Lauderdale at GTL, operates an ESMS that meets the requirements of the ISO 14001 standard. Conformance with the environmental policy and requirements noted in this document is expected of

contractors, subcontractors, suppliers and their employees while working on site. Failure to follow these requirements can be grounds for termination of the on-site contract work.

1.4 For further information, please contact the City of Fort Lauderdale, Regional Wastewater Facility Manager (954) 828-4100.

## **2.0 General Environmental Management Procedures**

- 2.1 Contractors will not transport hazardous chemicals on site without having prior knowledge of the associated Safety Data Sheets (SDS). These materials include but are not limited to sealers, adhesives, paints, coatings, fuels, oils, acids and caustics. Containers require review and approval before their use on site.
- 2.2 Contractors will provide adequate control of fugitive dust emissions during operations and activities.
- 2.3 Contractors will not discharge anything to drains and or sewers without the prior approval of GTL's Regional Wastewater Facility Manager.
- 2.4 Contractors will provide adequate spill/release prevention for bulk materials. And will provide:
  - (1) spill containment kit applicable to the chemical being handled under contract.
- 2.5 Contractors will immediately notify the Regional Wastewater Facility Manager of any spills, releases or other environmental incidents. Contractors will follow up by submitting a completed Tracking of Spills and Releases form or equivalent contractor document.
- 2.6 Contractors will properly label, store and dispose of waste materials.
- 2.7 Contractors will be sensitive to the effects of noise, odor, dust, light and traffic movement to the local community.
- 2.8 Contractors shall practice good housekeeping. Removal of trash, etc. generated by the contractor's activities or the activities of its employees is the contractor's responsibility.
- 2.9 Contractors are responsible for keeping the site clean and orderly on a daily basis.
- 2.10 Contractors will not engage in any excavation activities on site without utility locations and the prior approval of the Regional Wastewater Facility Manager.

## **3.0 Waste Disposal**

- 3.1 Waste disposal (i.e. construction debris, scrap metal, non-hazardous waste, municipal solid waste, etc.) will be the responsibility of the contractor, the originator of the waste, unless otherwise pre-approved.
- 3.2 The Regional Wastewater Facility Manager must be informed of generated hazardous waste streams before a waste is generated and collected on site.
- 3.3 The Regional Wastewater Facility Manager must be informed of the location of generated hazardous waste storage areas, maximum quantities and the container type.
- 3.4 Containers must be labeled with their contents and the responsible contractor's name and contact information. NO UNLABELED CONTAINERS ARE PERMITTED ON SITE.
- 3.5 Shipping information and paperwork (SDS, Waste Profiles, Bills of Lading and



inventory) must be provided upon request.

3.6 Contractors will be contractually responsible for all regulated wastes.

#### **4.0 Equipment Decommissioning**

4.1 Equipment will be thoroughly inspected by the contractor for fluids and other hazardous materials prior to removal.

4.2 Fluids and other hazardous materials in the equipment will be removed prior to decommissioning and disposal of any waste generated will be handled in accordance with the above instructions in 3.0.

#### **5.0 Water Discharges**

5.1 Discharge of materials to ANY sewer system, other than sanitary sewage, is prohibited without the prior consent of the Regional Wastewater Facility Manager.

5.2 Discharges of ANY material to outside drains other than storm water (not to the sewers) are prohibited under the established guidelines of the CLEAN WATER ACT.

5.3 In the event that the Regional Wastewater Facility Manager approves discharges to sewers, the wastewater treatment plant should still be notified prior to discharges of any significant volume or any discharges that could affect the operations of the wastewater treatment plant.

#### **6.0 Material Storage/Spills**

6.1 There will be no outside storage of any materials without the consent of the Regional Wastewater Facility Manager

6.2 Approved outside storage areas for chemical materials must be equipped with non-earthen secondary containment equal to 150% of the capacity of the largest container by the contractor.

6.3 The contractor will ensure that material containers owned or managed by the contractor will be properly labeled in accordance with the OSHA HAZARD COMMUNICATION STANDARD (i.e., contents, primary hazard).

6.4 The contractor will have available the safety data sheets (SDS) for all chemical products in use at all times that their employees are working on site. SDS's will be made available to personnel, medical personnel, environmental personnel or their representatives upon request.

6.5 The contractor will ensure that chemical containers are closed except when in use.

6.6 Contractors will maintain spill kits to contain and clean up small spills generated by their employees or from their materials. Spill kits will be kept on site and will be easily accessible during an emergency.

6.7 THE CONTRACTOR WILL IMMEDIATELY REPORT ALL SPILLS OR RELEASES OF MATERIALS to the City of Fort Lauderdale, Public Works Department Customer Service (954) 828-8000. Contractors will follow up by submitting a completed Tracking of Spills and Releases form.

#### **7.0 Storm Water Management**

7.1 No process materials or any other sources of water pollutant shall be co-mingled with storm water.

7.2 Solids must be prevented from entering sewer drains. Roadways and outside

areas should be kept clean.

- 7.3 It is the contractor's responsibility to install storm water control measures such as silt fences, straw bales, etc. to control the solids entering storm drains from erosion or other processes if necessary.
- 7.4 Dirt piles should be covered to prevent solids from entering storm drains unless otherwise directed.
- 7.5 Vehicle maintenance shall not be performed near storm drains unless it is emergency work and provisions have been made to contain any spills of vehicle fluids, including oil, gasoline and antifreeze.
- 7.6 In the event that a storm water management plan is required (i.e. greater than 1 acre of land is disturbed), the plan will be submitted to the Regional Wastewater Facility Manager for approval. Environmental Resources should be contacted.

## **8.0 PCBS**

- 8.1 If a material is suspected to have Polychlorinated biphenyls (PCB) contamination, the Regional Wastewater Facility Manager is to be notified. Environmental Resources should be contacted.
- 8.2 All PCB removals shall be coordinated by the Regional Wastewater Facility Manager and Environmental Resources
- 8.3 Any lighting ballast that does not state that it is a non-PCB containing ballast must be disposed of as PCB containing.

## **9.0 Asbestos**

- 9.1 Contractors will contact the Regional Wastewater Facility Manager prior to any construction or demolition work that could disturb existing structures or equipment.
- 9.2 All asbestos removal and disposal activities will be conducted in accordance with procedures approved by the Regional Wastewater Facility Manager.

## **10.0 Lead**

- 10.1 Contractors are responsible for testing for the presence of lead-based paints when grinding or welding on building or building structural steel. Testing will be done by an approved lab as directed by the Regional Wastewater Facility Manager.
- 10.2 All lead removal and disposal activities will be conducted in accordance with procedures approved by the Regional Wastewater Facility Manager.

## **11.0 CFCs**

- 11.1 Contractors will provide copies of employee training certificates to the Regional Wastewater Facility Manager upon request.
- 11.2 Venting of CFCs to the atmosphere is prohibited.

## **12.0 Contractor/Supplier Environmental Review**

- 12.1 Upon request, contractors are to submit the following form which contains written information outlining their activities and procedures for minimizing and managing the actual or potential environmental impacts of their operations. This will include an assessment of the potential risks to the environment, contractors, employees and other personnel associated with on-site activities and proposed measures for minimizing these risks.

**This form (if deemed applicable) must be completed, signed and returned before the contracted work commences.**

*The following information is to be filled out by the Contractor/Supplier (Please Print)*

Contact Person:  Date:

Company Name:

**Activities or Work Description:**

City of Fort Lauderdale site: xlxl

Briefly describe the activities or work to be undertaken by your company at the (City of Fort Lauderdale) site.

	5
	6

**Air Emissions:**

Will the activities or work you perform produce or cause the release of any air emissions?

☐ YES or ☐ NO

If YES, list the air emissions and the method for preventing impact to the environment.

	5
	6

**Water Discharges:**

Will the activities or work you perform produce or cause the release of any wastewater? ☐ YES

or ☐ NO

If YES, how will the wastewater be handled?

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	6

**Materials:**

What materials (chemicals, oils, (food-grade oils NSF approved should be used), etc.) and/or equipment will you be handling or bringing on site to perform the contracted work?

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	6

**Training:**

Your employees should be trained on the proper handling of materials and equipment, and the proper response to incidents involving these materials. Describe the training that your employees receive.

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	6

**Waste Generation:**

Will the activities or work you perform result in the generation of any wastes? ☐ YES or ☐ NO If YES, list the amounts and the types of wastes expected and the proposed disposal method.

	5
	6

Are any waste generated to be recycled? ☐ YES or ☐ NO

If YES, list the recyclables, where and how they will be recycled.

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	6

**Energy:**

Will the activities or work consume energy? ☐ YES or ☐ NO (Electricity, compressed air, natural gas, steam, etc.)

If YES, explain what type of energy will be consumed, and how you will minimize consumption.

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**Other:**

Are there any other ways in which your activities will affect or protect the environment? ☐ YES  
or ☐ NO

If YES, please describe below.

5

6

**Information:**

Company Name:

Contact: First Name:  Last Name:

Title:

Address:  City:  State:

Phone:  Fax:

Email:

Secondary Contact:  Sec. Phone:

**Environmental Agreement**

My company and subcontractors that I may bring to the site will abide by all environmental regulations and policies whenever on the property. My company will train all personnel contracting on the property. Sign-in sheets will be maintained as evidence that environmental training has been conducted and will be made available upon request. The Regional Wastewater Facility Manager or designee will communicate applicable changes of the Environmental Sustainable Management System to my company. Retraining of affected individuals will be conducted, as appropriate.

*For questions or additional information contact the City of Fort Lauderdale, Regional Wastewater Facility Manager or designee (954)828-4100.*

Print Name:

Title:

Signature:  Date:

**Supervisor Review and Approval**

☐ A review of the above-submitted document has been found to be: COMPLETE – approved, no further action is needed.

☐ INCOMPLETE – a response must be received by:

Supervisor Signature:  Date:

CITY OF FORT LAUDERDALE  
PUBLIC WORKS DEPARTMENT

MINORITY BUSINESS ENTERPRISE (MBE) - WOMEN BUSINESS ENTERPRISE (WBE)

PRIME CONTRACTOR IDENTIFICATION FORM

In order to assist us in identifying the status of those companies doing business with the City of Fort Lauderdale, this form must be completed and returned with your bid package.

Name of Firm:

Address of Firm:

Telephone Number:

Name of Person Completing  
Form:

Title:

Signature:

Date:

City Project Number:

City Project Description:

Please check the item(s) which properly identify the status of your firm:

- ☐ Our firm is not a MBE or WBE.
- ☐ Our firm is a MBE, as at least 51 percent is owned and operated by one or more socially and economically disadvantaged individuals.
- ☐ American Indian   ☐ Asian   ☐ Black   ☐ Hispanic
- ☐ Our firm is a WBE, as at least 51 percent is owned and operated by one or more women.
- ☐ American Indian   ☐ Asian   ☐ Black   ☐ Hispanic





## MBE/WBE CONTRACTOR INFORMATION

The City, in a continuing effort, is encouraging the increased participation of minority and women-owned businesses in Public Works Department related contracts. Along those lines, we are requiring that each firm provide documentation detailing their own programs for utilizing minority and women-owned businesses.

Submit this information as a part of this bid package and refer to the checklist, to ensure that all areas of concern are covered. The low responsive bidder may be contacted to schedule a meeting to discuss these objectives. It is our intention to proceed as quickly as possible with this project, so your cooperation in this matter is appreciated.

CONTRACTOR CHECKLIST

- ☐ List Previous City of Fort Lauderdale Contracts

	5
	6

- ☐ Number of Employees in your firm

--Percent () Women

--Percent () Minorities

--Job Classifications of Women and Minorities

	5
	6

- ☐ Use of minority and/or women subcontractors on past projects.

	5
	6

- ☐ Nature of the work subcontracted to minority and/or women-owned firms.

	5
	6

- ☐ How are subcontractors notified of available opportunities with your firm?

	5
	6

☐ Anticipated amount to be subcontracted on this project.

	5
	6

☐ Anticipated amount to be subcontracted to minority and/or women-owned businesses on this project.

	5
	6

**QUESTIONNAIRE SHEET**

PLEASE PRINT OR TYPE:

Firm Name:

President

Business Address:

Telephone:

Fax:

E-Mail Address:

What was the last project of this nature which you completed?

	5
	6

The following are named as three corporations and representatives of those corporations for which you have performed work similar to that required by this contract, and which the City may contact as your references (include addresses and telephone numbers):

	5
	6

How many years has your organization been in business? 

Have you ever failed to complete work awarded to you; if so, where and why?

The name of the qualifying agent for the firm and his position is:

Certificate of Competency Number of Qualifying Agent:

Effective Date:

Expiration Date:

Licensed in:

Contractor's License #(s)

(County/State)

Expiration Date:

**NOTE: To be considered for award of this contract, the bidder must submit a financial statement upon request.**

**Contractor must have proper licensing prior to submitting bid and must submit evidence of same with bid.**

**QUESTIONNAIRE SHEET**

1. Have you personally inspected the proposed work and have you a complete plan for its performance?

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	6

2. Will you sublet any part of this work? If so, list the portions or specialties of the work that you will.

a)	
b)	
c)	
d)	
e)	
f)	
g)	

3. What equipment do you own that is available for the work?

	5
	6

4. What equipment will you purchase for the proposed work?

	5
	6

5. What equipment will you rent for the proposed work?

	5
	6

3		4
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## LOCAL BUSINESS PREFERENCE

Section 2-199.2, Code of Ordinances of the City of Fort Lauderdale, (Ordinance No. C-12-04), provides for a local business preference.

In order to be considered for a local business preference, a bidder must include the Local Business Preference Certification Statement of this ITB, as applicable to the local business preference class claimed **at the time of bid submittal**:

Upon formal request of the City, based on the application of a Local Business Preference the Bidder shall within ten (10) calendar days submit the following documentation to the Local Business Preference Class claimed:

A) Copy of City of Fort Lauderdale current year business tax receipt, **or** Broward County current year business tax receipt, **and**

B) List of the names of all employees of the bidder and evidence of employees' residence within the geographic bounds of the City of Fort Lauderdale or Broward County, as the case may be, such as current Florida driver license, residential utility bill (water, electric, telephone, cable television), or other type of similar documentation acceptable to the City.

Failure to comply at time of bid submittal shall result in the bidder being found ineligible for the local business preference.

**THE COMPLETE LOCAL BUSINESS PREFERENCE ORDINANCE MAY BE FOUND ON THE CITY'S WEB SITE AT THE FOLLOWING LINK:**

**<http://www.fortlauderdale.gov/purchasing/index.htm>**

**Definitions:** The term "Business" shall mean a person, firm, corporation or other business entity which is duly licensed and authorized to engage in a particular work in the State of Florida. Business shall be broken down into four (4) types of classes:

1. Class A Business – shall mean any Business that has established and agrees to maintain a permanent place of business located in a non-residential zone and staffed with full-time employees within the limits of the City **and** shall maintain a staffing level of the prime contractor for the proposed work of at least fifty percent (50%) who are residents of the City.
2. Class B Business - shall mean any Business that has established and agrees to maintain a permanent place of business located in a non-residential zone and staffed with full-time employees within the limits of the City **or** shall maintain a staffing level of the prime contractor for the proposed work of at least fifty percent (50%) who are residents of the City.
3. Class C Business - shall mean any Business that has established and agrees to maintain a permanent place of business located in a non-residential zone **and** staffed with full-time employees within the limits of Broward County.
4. Class D Business – shall mean any Business that does not qualify as either a Class A, Class B, or Class C business.

## LOCAL BUSINESS PREFERENCE CERTIFICATION STATEMENT

The Business identified below certifies that it qualifies for the local BUSINESS preference classification as indicated herein, and further certifies and agrees that it will re-affirm its local preference classification annually no later than thirty (30) calendar days prior to the anniversary of the date of a contract awarded pursuant to this ITB. Violation of the foregoing provision may result in contract termination.

(1)

Business Name

is a **Class A** Business as defined in City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. A copy of the City of Fort Lauderdale current year Business Tax Receipt and a complete list of full-time employees and their addresses shall be provided within 10 calendar days of a formal request by the City.

(2)

Business Name

is a **Class B** Business as defined in the City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. A copy of the Business Tax Receipt or a complete list of full-time employees and their addresses shall be provided within 10 calendar days of a formal request by the City.

(3)

Business Name

is a **Class C** Business as defined in the City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. A copy of the Broward County Business Tax Receipt shall be provided within 10 calendar days of a formal request by the City.

(4)

Business Name

requests a **Conditional Class A** classification as defined in the City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. Written certification of intent shall be provided within 10 calendar days of a formal request by the City.

(5)

Business Name

requests a **Conditional Class B** classification as defined in the City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. Written certification of intent shall be provided within 10 calendar days of a formal request by the City.

(6)

Business Name

is considered a **Class D** Business as defined in the City of Fort Lauderdale Ordinance No. C-12-04, Sec.2-199.2. and does not qualify for Local Preference consideration.

BIDDER'S COMPANY:

AUTHORIZED COMPANY PERSON:

NAME	SIGNATURE	DATE

**NON-COLLUSION STATEMENT:**

By signing this offer, the vendor/contractor certifies that this offer is made independently and *free* from collusion. Vendor shall disclose below any City of Fort Lauderdale, FL officer or employee, or any relative of any such officer or employee who is an officer or director of, or has a material interest in, the vendor's business, who is in a position to influence this procurement.

Any City of Fort Lauderdale, FL officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement.

For purposes hereof, a person has a material interest if they directly or indirectly own more than 5 percent of the total assets or capital stock of any business entity, or if they otherwise stand to personally gain if the contract is awarded to this vendor.

In accordance with City of Fort Lauderdale, FL Policy and Standards Manual, 6.10.8.3,

3.3. City employees may not contract with the City through any corporation or business entity in which they or their immediate family members hold a controlling financial interest (e.g. ownership of five (5) percent or more).

3.4. Immediate family members (spouse, parents and children) are also prohibited from contracting with the City subject to the same general rules.

**Failure of a vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the City Procurement Code.**

**NAME****RELATIONSHIPS**

-







**In the event the vendor does not indicate any names, the City shall interpret this to mean that the vendor has indicated that no such relationships exist.**



## CONTRACT PAYMENT METHOD

The City of Fort Lauderdale has implemented a Procurement Card (P-Card) program which changes how payments are remitted to its vendors. The City is transitioning from traditional paper checks to credit card payments via MasterCard or Visa as part of this program.

This allows you as a vendor of the City of Fort Lauderdale, to receive your payment fast and safely. No more waiting for checks to be printed and mailed.

In accordance with Article 7, item 7.6 of the contract, payments on this contract will be made utilizing the City's P-Card. Accordingly, bidders must presently have the ability to accept these credit cards or take whatever steps necessary to implement acceptance of a card before the start of the contract term, or contract award by the City.

Please indicate with which credit card you prefer to be paid:

☐ Master Card

☐ Visa Card

Company Name:

Signature:

Print Name Title:

**CONSTRUCTION BID CERTIFICATION**

**Please Note:** All fields below must be completed. If the field does not apply to you, please note N/A in that field. If you are a foreign corporation, you may be required to obtain a certificate of authority from the department of state, in accordance with Florida Statute §607.1501 (visit <http://www.dos.state.fl.us/>).

Company: (Legal Registration)

Address:

City:  State:  Zip:

Telephone No.  FAX No.  Email:

Does your firm qualify for MBE or WBE status: MBE ☐ WBE ☐

If a corporation, state the name of the President, Secretary and Resident Agent. If a partnership, state the names of all partners. If a trade name, state the names of the individuals who do business under the trade name.

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Name</b>	<b>Title</b>	<b>Name</b>	<b>Title</b>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Name</b>	<b>Title</b>	<b>Name</b>	<b>Name</b>

**ADDENDUM ACKNOWLEDGEMENT** - Bidder acknowledges that the following addenda have been received and are included in the bid:

Addendum No.	Date Received	Addendum No.	Date Received	Addendum No.	Date Received	Addendum No.	Date Received
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**VARIANCES:** If you take exception or have variances to any term, condition, specification, or requirement in this bid you must specify such variance in the space provided below or reference in the space provided below all variances contained on other pages within your bid. Additional pages may be attached if necessary. No variances will be deemed to be part of the bid submitted unless such is listed and contained in the space provided below. The City does not, by virtue of submitting a variance, necessarily accept any variances. If no statement is contained in the below space, it is hereby implied that your response is in full compliance with this competitive solicitation. If you do not have variances, simply mark N/A. If submitting your response electronically through BIDS SYNC you must also click the "Take Exception" button.

The below signatory affirms that he has or will obtain all required permits and licenses from the appropriate agencies, and that his firm is authorized to do business in the State of Florida. The below signatory agrees to furnish all labor, tools, material, equipment and supplies, and to sustain all the expense incurred in doing the work set forth in strict accordance with the bid plans and contract documents at the unit prices indicated if awarded a contract. The below signatory has not divulged to, discussed, or compared this bid with other bidders, and has not colluded with any other bidder or parties to this bid whatsoever. Furthermore, the undersigned guarantees the truth and accuracy of all statements and answers contained in this bid. The below signatory also hereby agrees, by virtue of submitting or attempting to submit a bid, that in no event shall the City's liability for bidder's direct, indirect, incidental, consequential, special or exemplary damages, expenses, or lost profits arising out of this competitive solicitation process, including but not limited to public advertisement, bid conferences, site visits, evaluations, oral presentations, or award proceedings exceed the amount of Five Hundred Dollars (\$500.00). This limitation shall not apply to claims arising under any provision of indemnification or the City protest ordinance contained in this competitive solicitation.

**Submitted by:**

Name (printed)

Date:

Signature

Date:

PRE-BID MEETING/SITE VISIT  
ATTENDANCE SIGN-IN FORM

P12170 & 12181

DATE: 7/20/2017

TIME: 10:30 a.m.

BID NO.: 673-11973

OPENING DATE: 8/9/2017

ITB TITLE: Water Treatment Plant Concrete Restoration

PROCUREMENT CONTACT: Maureen Lewis

PROJECT MANAGER: Steve Hillberg & Katherine Griffith

#	NAME	COMPANY	PHONE	EMAIL
1	Maureen Lewis	City of Ft. Lauderdale	(954) 828-5239	maureenl@fortlauderdale.gov
2	Steve Hillberg	City of Ft. Lauderdale	(954) 828-5076	shillberg@fortlauderdale.gov
3	Katherine Griffith	City of Ft. Lauderdale	(954) 828-6126	kggriffith@fortlauderdale.gov
4	Pierre Simon	TO MASON BATHING INC.	(954) 987-1661	pierre180808@gmail.com
5	Jason Cox	Cypress Construction	(334) 822-1687	Jason @ Cypresscc.net
6	Thad Bockley	RF ENVIRONMENTAL SERVICES INC.	(454) 605-6711	Thad 3939@gmail.com





PRE-BID MEETING/SITE VISIT  
ATTENDANCE SIGN-IN FORM

P12170 &amp; 12181

#	NAME	COMPANY	PHONE	EMAIL
7	Jeff Westrick	address construction	231.422 8427	Jeff@address.co.net
8	Donnellis Batista	Donano Builders corporation	(866)609 8432	fern8620@bellsouth.net
9	Ken Foss	Martin Case Const.	954-288- 6071	estimating@martin case.net
10	Chris Calhoun	Southern Star Contractors inc	561 593-1760	Southernstar contractors@gmail.com
11	Rail Bugar	Reinzo, LLC	407-376- 0736	rrayaejrtechnicalpro.com
12	Armando Chirico	Reinzo, LLC	407-3050	chirico@aol.com
13	Greg Batista	6 Batista & Assa	954 822 8404	gbatista@gbanda.com
14	Mark McGowan	STRUCTURAL	954 658-5659	mmcgowan@structural.net
15	Rob Harris	COPFL	954 <del>828-4121</del> 828-4121	harris@fortlauderdale.gov

CAM #17-1080  
Exhibit 3  
Page 266 of 271

**PRE-BID MEETING/SITE VISIT  
ATTENDANCE SIGN-IN FORM**

**P12170 & 12181**

#	NAME	COMPANY	PHONE	E-MAIL
16	Jason Cox	Cypress Construction	239 822 1687	Jason@Cypresscc.net
17				
18				
19				
20				
21				
22				
23				
24				



ATTENDANCE SIGN-IN FORM PRE-BID MEETING 2.5.17		PRE-BID MEETING 2.5.17	
NAME	COMPANY	PHONE	EMAIL
Jason Cox	Construction	1/683 893	Jason@chance.net



**PRE-BID MEETING/SITE VISIT  
ATTENDANCE SIGN-IN FORM**

**P12170 & 12181**

DATE: 7/25/2017

TIME:

10:00 a.m.

BID NO.: 673-11973

OPENING DATE:

8/9/2017

ITB TITLE: Water Treatment Plant Concrete Restoration

PROCUREMENT CONTACT: Maureen Lewis

PROJECT MANAGER: Steve Hillberg & Katherine Griffith

#	NAME	COMPANY	PHONE	EMAIL
1	Maureen Lewis	City of Ft. Lauderdale	(954) 828-5239	maureenl@fortlauderdale.gov
2	Steve Hillberg	City of Ft. Lauderdale	(954) 828-5076	shilberg@fortlauderdale.gov
3	Katherine Griffith	City of Ft. Lauderdale	(954) 828-6126	kgrieffth@fortlauderdale.gov
4	Chris Catchpole	Southern Star Contractors Inc	561 323 1760	southernstarcontractors@gmail.com
5	Donelkis Batista	LUNANO BUILDERS CORP.	(866) 605-8932	fun8660@bellsouth.net
6	Jason Cox	Cypress Construction	(839) 303-3250	Jason@Cypressce.net

PRE-BID MEETING/SITE VISIT  
ATTENDANCE SIGN-IN FORM

P12170 & 12181

#	NAME	COMPANY	PHONE	EMAIL
7	Thud Buckley	RE ENVIRONMENTAL	954-605 6711	thud3939@gmail.com
8	Jose L Encarnacion	G. Batista & Associates	954-434- 2053	josee@gbanda.com gbatista@gbanda.com
9	Ken Foes	Martin Case Const.	954-288- 6071	estimating@martin-case.net
10	Cesar Alza	City of Ft. Laud.	954- 828-7865	cesara@fortlauderdale.gov
11	Ed Rogers	City of Ft. Laud.	954 828-7864	EROGERS@fortlauderdale.gov
12	Alon Ruark	City of Fort Laud.	954 828-7867	RRuark@FortLauderdale.gov
13	Dan Herms	C. FTL	954. 828.7502	DHERMS@FORTLAUDERDALE.GOV
14	James Dees	ELLC	912 233-3268	Jdeedes@yahoo.com
15				

## Question and Answers for Bid #673-11973 - Water Treatment Plant Concrete Restoration (P12170 & 12181)

### Overall Bid Questions

#### Question 1

What is the proposed budget for this project? (Submitted: Jul 20, 2017 10:04:38 AM EDT)

#### Answer

- Approximately \$420,400. (Answered: Jul 21, 2017 9:36:59 AM EDT)

#### Question 2

Can the canal be shut down, if so for how long? (Submitted: Jul 31, 2017 3:18:55 PM EDT)

#### Answer

- Question voided (Answered: Jul 31, 2017 3:49:23 PM EDT)

#### Question 3

Disregard my previous question, I posted it on the wrong project. (Submitted: Jul 31, 2017 3:40:11 PM EDT)

#### Answer

- Question voided (Answered: Jul 31, 2017 3:49:23 PM EDT)

#### Question 4

Please confirm that the Bid Bond Amount is 10% not the Standard 5% (Submitted: Aug 2, 2017 12:18:31 AM EDT)

#### Answer

- It is 10% as indicated in the bid packet. (Answered: Aug 3, 2017 4:59:55 PM EDT)