



INVITATION TO BID (ITB) NO. 1009-0-2021/LD

DISTRICT PLUMBING SERVICES

FOR MARTIN COUNTY SCHOOL BOARD

PURCHASING DEPARTMENT
2845 SE DIXIE HWY
STUART, FLORIDA, 34997
TEL (772) 219-1255
EMAIL bids@martinschools.org



**NOTICE OF
INVITATION TO BID**

Bid documents must be submitted electronically through www.DemandStar.com or bids@martinschools.org by responding no later than the designated deadline date and time. A Bidder’s failure to submit as required before the deadline shall cause their bid to be disqualified. Under no circumstances shall bids delivered to or received by the District or Demandstar after the Due Date and Time be accepted or considered. Late bids will be retained unopened.

Solicitation Documents may be obtained by registering with www.DemandStar.com or from www.vendorregistry.com. Bidders who obtain solicitation documents from any other source are cautioned that the solicitation package may be incomplete. Furthermore, all addenda issued will be posted and disseminated by DemandStar to planholders/members.

The following meeting dates are subject to change according to the needs of the District.

| | |
|--------------------------------|---|
| ITB Number: | 1009-0-2021/LD |
| ITB Name: | District Plumbing Services |
| ITB Advertising/Publish Dates: | September 15, 2021 |
| Questions Deadline: | September 29, 2021 at 2:00pm |
| ITB Closing Date/Time: | October 13, 2021 By No Later Than 2:00pm |
| Anticipated Award Date | November 16, 2021 |
| Contact Information: | Email: bids@martinschools.org |
| Email Notifications: | Start all email subject lines with the ITB number for faster recognition. |
| Submittal Requirements: | Submit bid by completing and returning all required documents. All submittals are required to be electronic and be contained in one (1) file. Hard copies, mailed, or facsimile responses shall not be accepted. Under no circumstances shall bids delivered to or received by the District or Demandstar after the Due Date and Time be accepted or considered. Late proposals will be retained unopened. It is the sole responsibility of the Bidder to assure that their submittal is uploaded to DemandStar or bids@martinschools.org on or before the Due Date and Time. The District shall in no way whatsoever be responsible for any delays caused by any power outages or internet failures. No exceptions will be made. |
| Submit Bid to:: | Bidder shall submit their bid indicating Bidder’s name and Project Name, ITB Number, and time and date of the ITB opening. Bids shall be submitted electronically through www.DemandStar.com or bids@martinschools.org . |
| ITB Scope of Work: | The Martin County School District (hereinafter referred to as “MCSD”) is soliciting Licensed Plumbing Contractors to submit bids for various District plumbing projects on an as needed (work order) basis for the initial one year term with 2 (1) year renewal options, in accordance with the MCSD Project Manual specifications. |

Bidders may not withdraw their bid submittal for a period of ninety (90) calendar days after the day set for the opening of bids.

The District reserves the right to waive any informalities or irregularities, reject any and all bids that are incomplete, conditional, non-responsive, or which contain additions not allowed for; to reject any or all bids in whole or in part with or without cause; to award in whole or in part to one or more Bidders, and to accept the bid which best serves the District.



ADVERTISEMENT PUBLICATION

Martin County School Board
2845 S.E. Dixie Highway
Stuart, FL 34997

**ITB# 1009-0-2021/LD
DISTRICT PLUMBING SERVICES**

The Martin County School District (hereinafter referred to as "MCSD") is soliciting a Licensed Plumbing Contractors, Certified or Registered, on an as needed basis, to provide various District Plumbing Services, in accordance with the project manual specifications for an initial one (1) year period with two (2) one year renewal options.

Solicitation Documents may be obtained by registering with www.DemandStar.com or from www.vendorregistry.com. The District is not responsible for the content of any submittal package received through any 3rd party service or any other source.

A Bid Bond in an amount of five percent (5%) of the total amount bid is required and must be submitted with their bid. The Bid Surety may be in the form of a Surety Bond with a carrier duly licensed and authorized to do business in the State of Florida, Cashier's Check or Certified Check (checks made payable to School Board of Martin County, Florida).

Firms desiring to provide the services described shall submit one (1) complete electronic submittal, contained in one (1) file, PDF format preferred, submitted electronically through www.DemandStar.com or bids@martinschools.org containing all of the required information **no later than 2:00pm, October 13, 2021.**

Questions: Email bids@martinschools.org by no later than 2:00 pm eastern time on September 29, 2021.

Publish Date: 9/15/21



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SECTION I

DEFINITIONS, ABBREVIATIONS, & ACRONYMS

Wherever used in the Contract Documents the following terms have the meanings indicated in the industry which are applicable to both the singular and plural thereof:

1.1. **Acceptance:** By the DISTRICT'S PROJECT MANAGER of the Work as being fully complete in accordance with the Contract Documents.

1.2. **Addenda:** Written or graphic instruments issued prior to the opening of Bids which clarify, correct or change the Bidding Requirements or the Contract

1.3. **Application for Payment:** The form accepted by the CONSULTANT which is to be used by CONTRACTOR to request progress payments or final payment and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

1.4. **Bid:** The formal firm price offer of the BIDDER submitted on the prescribed form setting forth the prices for the WORK in response to the Invitation to Bid.

1.5. **Bidder:** Any person, firm or corporation submitting a Bid for the Work directly to the DISTRICT. As used in this Invitation to Bid, the words proposer and contractor may be used interchangeably to mean Bidder.

1.6. **Bid Documents:** Includes the Invitation to Bid, Instructions to Bidders, Bid Form, and proposed Contract Documents (including all Addenda issued prior to receipt of Bids).

1.7. **Bonds:** Bid security/guarantee, performance, and payment bonds and other instruments of security, furnished by the CONTRACTOR and his surety in accordance with the Contract Documents and in accordance with the law of the place of the project.

1.8. **Cable:** An assembly of one or more insulated conductors or optical fibers, within an enveloping sheath.

1.9. **Certified Contractor:** Any contractor who possesses a certificate of competency issued by the department and who shall be allowed to contract in any jurisdiction in the state without being required to fulfill the competency requirements of that jurisdiction.

1.10. **Change Order:** A written order to the CONTRACTOR executed by the DISTRICT, CONSULTANT, and CONTRACTOR authorizing an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Time issued after execution of the Contract.

1.11. **Consultant/Engineer of Record:** The Architect or Engineer, also referred to as **EOR (Engineer or Record)**, firm or corporation named as such in the Contract Documents that acts as the District's authorized agent within the scope of work entrusted to them by the District.

1.12. **Consultant's Representative:** An authorized representative of the Consultant assigned to observe the work performed and materials furnished by the CONTRACTOR.

1.13. **Contract:** The written agreement between DISTRICT and CONTRACTOR covering the WORK to be performed.

1.14. **Contract Documents:** The Contract Documents establish the rights and obligations of the parties. The Notice of Tentative Award, including the contract is directed for signature as acceptance of offer by the Contractor, prior to Board approval for award. Once approved, a notice of award requesting the bonds and insurance are requested. The executed contract documents, including exhibits (solicitation/submittal), bonds, and insurance are provided to the Contractor. CONSULTANT'S written interpretations and clarifications issued on or after the Effective Date of the Contract.

Please review Section VIII, Sample Contract, and note any objections, or revisions that would be required within the submittal. Should no revisions be noted, the District will assume and the Contractor agrees that the terms and conditions of agreement are acceptable. The proposed Agreement does not authorize the performance of any work.

Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Contract Documents. Only printed or hard copies of the items listed in this paragraph are Contract Documents. Files in electronic media format of text, data, graphics, and the like that may be furnished by DISTRICT to CONTRACTOR are not Contract Documents.

1.15. **Contract Price:** The total monies payable by the DISTRICT to the CONTRACTOR under the terms and conditions of the Contract Document.

1.16. **Contract Time:** The number or numbers of successive days or dates stated in the Contract Documents for the completion of the WORK.

1.17. **Contractor:** The individual, partnership, corporation, joint-venture, or other legal entity with whom the DISTRICT has entered into the Contract. Can be used interchangeably with the term bidder and / or vendor.

1.18. **Day:** A calendar day of 24 hours measured from midnight to the next midnight.

1.19. **Defective Work:** WORK that is unsatisfactory, faulty, or deficient; or that does not conform to the Contract Documents; or that does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents; or WORK that has been damaged prior to the CONSULTANT'S recommendation of final payment.

1.20. **District:** The Martin District School District, Florida, a Florida school district, its authorized and legal representatives, the public entity with whom the Contractor has entered into the Contract and for whom the WORK is to be provided.

1.21. **District Representative:** The person or persons designated by the DISTRICT'S PROJECT MANAGER. The DISTRICT'S PROJECT MANAGER. This may include the CONSULTANT/EOR.

1.22. **DP:** Dead pairs: Unused copper pairs terminating within splice case, but without being splices to outgoing cable.

1.23. **Drawings:** The drawings, plans, maps, profiles, diagrams, and other graphic representations which show character, location, nature, extent and scope of the WORK, which have been prepared or approved by CONSULTANT and are included and/or referred to in the Contract Documents. Shop Drawings are not Drawings as so defined.

1.24. **Effective Date of the Contract:** The date indicated in the Contract, but if no such date is indicated it means the date on which the Contract is signed by the last of the two parties to sign the Contract.

1.25. **Field Order:** A written order issued by the DISTRICT'S PROJECT MANAGER or by the CONSULTANT which clarifies or interprets the Contract Documents in accordance with Article 9.4 or orders minor changes in the Work in accordance with Article 10.1 of Supplementary Conditions

1.26. **Florida Plumbing License Requirements:** Florida requires a Registered Contractor, Certified Contractor, and Specialty



License in order to do construction work. A contractor license is required in Florida before bidding on any projects. In Florida, the individual registered plumber is licensed by the city or county while the contractual plumber is licensed by the state. To become a general licensed contractor, candidates are required to pass the Florida plumbing exam and the business and finance exam.

1.27.**GEC:** Grounding electrode conductor: Conductor used to connect grounding electrode to equipment grounding conductor, or to grounded conductor of circuit at service equipment, or at source of separately derived system.

1.28.**GP:** Grounding electrode: Conductor (rod, pipe or plate or group of conductors) in direct contact with earth for purpose of providing low-impedance connection to earth.

1.29.**General Requirements:** See Special Conditions and Division 1 of the Technical Specifications.

1.30.**Handbox:** Rectangular or square underground pathway element similar to small maintenance hole, which cannot be fully entered, that allows for pulling point or splice point in power, security or communications pathway.

1.31.**Handhole:** A round underground pathway element similar to a handbox, which cannot be fully entered, that allows for a pulling point in a pathway

1.32.**Helper** - Must be accompanied by a Journeyman at all times, but does not have to meet a minimum for years of experience.

1.33.**ICP:** Inside Cable Plant: Part of Information Transport System running within buildings. ICP elements include workstation outlet assembly, cabling to the workstation from network rooms, backbone cabling within building, backbone cabling running between physically contiguous buildings, network racks and hardware (routers, switches, hubs, firewalls, etc.), patch panels, punch blocks, fiber distribution panels, patch cords, and cross-connect cables/wires.

1.34.**Identifier:** An item of information that links a specific element of the Information Transport System infrastructure with its corresponding record.

1.35.**Infrastructure (Information Transport System):** A collection of those Information Transport System components, excluding equipment, that together provides the basic support for the distribution of all information within a building or campus

1.36.**Irregular Bids:** Irregular Bids are defined as those containing serious omissions, unauthorized alternative Bids, incomplete Bids or unbalanced Bids.

1.37.**ITS:** Information Transport System: Copper cabling or optical fiber for transmission of information on School District property. Transmission includes data, video, voice, fire alarm, security, access control, and other low-voltage networks. Information Transport System is not limited to School District-owned cabling, but includes copper and optical fiber, and equipment owned by outside providers carrying School District's information. Pathways are not limited by School District's ownership, but include those owned by any third party. Information Transport System may be referred to as "the network" within project documents

1.38.**Journeyman Plumber:** Licensed plumber with minimum five (5) years' experience performing plumbing services. A journeyman plumber, has less experience and tends to focus on the plumbing parts of their job. To become a journeyman plumber, one must be able to fix blockages, install pipes and fixtures in compliance with building codes, work with all types of plumbing

systems, plan and develop systems for new construction, retrofit plumbing in existing buildings, and understand how to handle environmental issues.

1.39.**Laws and Regulations:** Laws, rules, codes, regulations, ordinances and/or orders promulgated by a lawfully constituted body authorized to issue such Laws and Regulations.

1.40.**Linkage:** A connection between a record and an identifier or between records.

1.41.**Maintenance (man) holes:** Underground pathway element large enough for person to fully enter work, used to provide access to underground cable to pull, splice, and maintain.

1.42.**Maintenance** - A preventive or corrective action to maintain an existing public facility in an operational state or to preserve the facility from failure or decline. **SEE REPAIR #155.**

1.43.**Master Plumber:** For those looking to obtain a license at the master plumber level, you must obtain both your contractor's and plumber's license. The plumber's license requires you to have the appropriate training to qualify, at least seven years' experience, two of which must be spent as a journeyman. A contractor's license is also required for you to do business in the state.

1.44.**Media (Information Transport System):** Wire, cable, or conductors used for Information Transport System.

1.45.**Notice to Proceed:** The written notice issued by the District, or it's agents, to the Contractor authorizing the Contractor to proceed with the work and establishing the date of commencement of the Contract Time and the date the Contract WORK is to be completed.

1.46.**Notice of Tentative (or Intent) Award:** The official written notice by the DISTRICT to the apparent successful BIDDER giving authorization to enter into an agreement, stating that upon compliance and Board approval with the conditions precedent enumerated therein within the time specified, and receipt of accepted offer.

1.47.**OB:** Outlet box: Metallic or nonmetallic box used to hold Information Transport System outlets/connectors or transition devices

1.48.**OCP:** Outside Cable Plant: Part of Information Transport System running between buildings, from building to definable exterior point, between definable exterior points, or from non-School District source to School District building or definable exterior point. OCP includes termination punch blocks, fiber distribution panels, interior splices for outside to inside optical fiber transition, and other initial device into which outside cable attaches. OCP does not include backbone cable running between physically contiguous buildings unless cabling enters OSP pathway element (e.g. OSP conduits, maintenance holes, etc.). OCP includes underground cabling and aerial cabling.

1.49.**Outlet(Connector) (Information Transport System):** Connecting device in work area on which horizontal cable or outlet cable terminates

1.50.**Partial Utilization:** Placing a portion of the WORK in service for the purpose for which it is intended (or a related purpose) before reaching Substantial Completion for all the WORK.

1.51.**Pathway:** Facility for the placement of Information Transport System cable.

1.52.**Plumbing Contractor:** A contractor whose services are unlimited in the plumbing trade and includes contracting business consisting of the execution of contracts requiring the experience,



financial means, knowledge, and skill to install, maintain, repair, alter, extend, or, if not prohibited by law, design plumbing. A plumbing contractor may install, maintain, repair, alter, extend, or, if not prohibited by law, design the following without obtaining an additional local regulatory license, certificate, or registration: sanitary drainage or storm drainage facilities, water and sewer plants and substations, venting systems, public or private water supply systems, septic tanks, drainage and supply wells, swimming pool piping, irrigation systems, and solar heating water systems and all appurtenances, apparatus, or equipment used in connection therewith, including boilers and pressure process piping and including the installation of water, natural gas, liquefied petroleum gas and related venting, and storm and sanitary sewer lines. The scope of work of the plumbing contractor also includes the design, if not prohibited by law, and installation, maintenance, repair, alteration, or extension of air-piping, vacuum line piping, oxygen line piping, nitrous oxide piping, and all related medical gas systems; fire line standpipes and fire sprinklers if authorized by law; ink and chemical lines; fuel oil and gasoline piping and tank and pump installation, except bulk storage plants; and pneumatic control piping systems, all in a manner that complies with all plans, specifications, codes, laws, and regulations applicable. The scope of work of the plumbing contractor applies to private property and public property, including any excavation work incidental thereto, and includes the work of the specialty plumbing contractor. Such contractor shall subcontract, with a qualified contractor in the field concerned, all other work incidental to the work but which is specified as being the work of a trade other than that of a plumbing contractor. This definition does not limit the scope of work of any specialty contractor certified pursuant to s. 489.113(6), and does not require certification or registration under this part of any authorized employee of a public natural gas utility or of a private natural gas utility regulated by the Public Service Commission when disconnecting and reconnecting water lines in the servicing or replacement of an existing water heater. A plumbing contractor may perform drain cleaning and clearing and install or repair rainwater catchment systems; however, a mandatory licensing requirement is not established for the performance of these specific services.

1.53. Project: The total construction of which the WORK to be provided under the Contract Documents may be the whole, or a part as indicated elsewhere in the Contract Documents.

1.54. Registered Contractor: Any contractor who has registered with the department pursuant to fulfilling the competency requirements in the jurisdiction for which the registration is issued. Registered contractors may contract only in such jurisdictions.

1.55. Repair: A corrective action to restore an existing public facility to a safe and functional condition.

- A. Repair or maintenance includes activities that are necessarily incidental to repairing or maintaining the facility.
- B. Repair or maintenance does not include the construction of any new building, structure, or other public construction works or any substantial addition, extension, or upgrade to an existing public facility.
- C. Repair and maintenance projects and any related additions, extensions, or upgrades may not be divided into multiple projects for the purpose of evading the requirements of 255.20, F.S.

1.56. Record: Collection of detailed information related to specific element of Information Transport System infrastructure.

1.57. Renovate - To restore to a former or better state; to make new or as if new again.(as by cleaning, repairing, or rebuilding.

1.58. Report: Presentation of collection of information from various records.

1.59. Resident Project Representative (RPR): The authorized representative of the CONSULTANT who is assigned to the Site or any part thereof.

1.60. Responsible Bidder, Offerer, Quoter, Or Respondent: means an individual or business which has submitted a bid, offer, proposal, quotation, or response, which has the capability in all respects to perform fully the contract requirements, and the integrity and reliability which will give reasonable assurance of good faith and performance.

1.61. Responsive Bidder, Offerer, Quoter, Or Respondent, Vendor, Contractor means an individual or business which has submitted a bid, offer, proposal, quotation or response, which conforms in all material respects to the solicitation, including, but not limited to compliance with any M/WBE requirements contained within the solicitation.

1.62. Shop Drawings: All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by or for the CONTRACTOR, a Subcontractor, manufacturer, supplier or distributor and which illustrate the equipment, material or some portion of the Work and as required by the Contract Documents. Shop Drawings are not part of the Contract Documents and failure of the CONSULTANT or the COUNTY or any of his representatives to take exception to any product, material, system or installation depicted on Shop Drawings that are not in conformance with the requirements of the Contract Documents shall not constitute a Field Order or Change Order or any other Modification of the Contract Documents, and shall not relieve the CONTRACTOR from complying with any portion of the Contract Documents.

1.63. Safety Data Sheet: The manufacturer, importer, or distributor of a toxic substance will provide a safety data sheet with his/her offer.

1.64. Safety Precautions: The Contractor shall be responsible for the provision of adequate and proper safety precautions for the workmen and all persons in or around the work area.

1.65. Space (Information Transport System): Area used for housing installation and termination of Information Transport System equipment and cable, e.g., equipment rooms, network rooms, work areas, and maintenance holes/handboxes/handholes.

1.66. Special Conditions: When included as a part of the Contract Documents, Special Conditions refer only to the Work under this Contract. Special Conditions take precedent over the General Conditions.

1.67. Specialist: A person who concentrates primarily on a particular subject or activity; a person highly skilled in a specific and restricted field.

1.68. Specialty Contractor: A contractor whose scope of work and responsibility is limited to a particular phase of construction established in a category adopted by board rule and whose scope is limited to a subset of the activities described in one of the paragraphs of this subsection.

1.69. Specifications: Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the WORK and certain administrative details applicable thereto.

1.70. Splice: Joining of conductors in splice closure, meant to be permanent.



1.71. **Splice Box:** Box, located in pathway run, intended to house cable splice.

1.72. **Splice Closure:** Device used to protect splice.

1.73. **Sub-Bidder:** One who submits a Bid to a Bidder.

1.74. **Subcontractor:** An individual, firm, or corporation having a direct contract with the CONTRACTOR or with any other Subcontractor for the performance of a part of the WORK at the Site.

1.75. **Substantial Completion:** For purposes of this Contract, and for compliance of those procedures, duties and obligations as set forth in Florida Statutes §218.70 and §218.735, the term Substantial Completion shall be as follows, in lieu of any other definition:

- A. "Substantial Completion" is defined as that point where the District is able to enjoy beneficial occupancy of the Work and where the Work has achieved that level of completion such that District is able to utilize the entire Project for its intended purposes, including but not limited to the completion of all specified systems and items relating to life safety and regulatory use, with the exception of incidental or incomplete items except where a lack of completion of such incidental or incomplete items of Work shall adversely affect the complete operation of other areas of the Work.
- B. Additional conditions (if any) needed to achieve Substantial Completion of the Work and which are project specific are as set forth in attached Technical Specifications.
- C. When the entire Project is considered to be Substantially Complete, this does not constitute Final Acceptance or Final Completion of the entire Project.

1.76. **Successful Bidder:** The lowest, qualified, responsible and responsive Bidder to whom District (on basis of District's evaluation as hereinafter provided) makes an award.

1.77. **Supplementary Conditions:** The part of the Contract Documents which amends or supplements these General Terms and Conditions.

1.78. **Supplier:** A manufacturer, fabricator, supplier, distributor, materialman or vendor.

1.79. **Surety:** The corporate body which is bound with the CONTRACTOR and which engages to be responsible for the CONTRACTOR and his acceptable performance of the Work.

1.80. **Termination position:** Discrete element of termination hardware where information Transport System conductors are terminated.

1.81. **Unbalanced Bids:**

- A. **Mathematically Unbalanced Bid** means a bid containing lump sum or unit bid items which do not reflect reasonable actual costs plus a reasonable proportionate share of the bidder's anticipated profit, overhead costs, and other indirect costs.
- B. **Materially Unbalanced Bid** means a bid which generates a reasonable doubt that award to the bidder submitting a mathematically unbalanced bid will result in the lowest ultimate cost to the City; or which is so mathematically unbalanced as to result in an advance payment.

1.82 **Underground Utility and Excavation Contractor:** A contractor whose services are limited to the construction, installation, and repair, on public or private property, whether accomplished through open excavations or through other means, including, but not limited to, directional drilling, auger boring, jacking and boring, trenchless technologies, wet and

dry taps, grouting, and slip lining, of main sanitary sewer collection systems, main water distribution systems, storm sewer collection systems, and the continuation of utility lines from the main systems to a point of termination up to and including the meter location for the individual occupancy, sewer collection systems at property line on residential or single-occupancy commercial properties, or on multi-occupancy properties at manhole or wye lateral extended to an invert elevation as engineered to accommodate future building sewers, water distribution systems, or storm sewer collection systems at storm sewer structures. However, an underground utility and excavation contractor may install empty underground conduits in rights-of-way, easements, platted rights-of-way in new site development, and sleeves for parking lot crossings no smaller than 2 inches in diameter if each conduit system installed is designed by a licensed professional engineer or an authorized employee of a municipality, county, or public utility and the installation of such conduit does not include installation of any conductor wiring or connection to an energized electrical system. An underground utility and excavation contractor may not install piping that is an integral part of a fire protection system as defined in s. 633.021 beginning at the point where the piping is used exclusively for such system

1.83. **Unit Price Work:** WORK to be paid for on the basis of unit prices.

1.84. **Utilities:** All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities which have been installed underground or above ground to furnish any of the following services or materials: electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water supply or distribution, sewage and drainage removal, traffic or other control systems.

1.85. **Work:** Any and all obligations, duties and responsibilities necessary to the successful completion of the Project assigned to or undertaken by Contractor under the Contract Documents, including all labor, materials, equipment and other incidentals, and the furnished thereof.

1.86. **Work Area (work station):** Building space where occupants interact with Information Transport System terminal equipment

1.87. **Work Change Directive:** A written directive to Contractor, issued on or after the Effective Date of the Contract and signed by the District and recommended by the Consultant/EOR, ordering an addition, deletion or revision in the WORK, or which references an emergency or unforeseen physical conditions under which the WORK is to be performed. A Work Change Directive may not change the Contract Price or the Contract Time, but is evidence that the parties expect that the change directed or documented by a Work Change Directive shall be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Time.

1.88. **Written Amendment:** A written amendment of the Contract Documents, signed by the DISTRICT and CONTRACTOR on or after the Effective Date of the Contract and normally dealing with the non-engineering or non-technical rather than strictly WORK related aspects of the Contract Documents.

1.89. **Intent of Certain Terms:**

- A. Furnish, Install, Perform, Provide
 - 1) The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.



- 2) The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
 - 3) The words "perform," or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials or equipment complete and ready for intended use.
- B. When "furnish," "install," "perform," or "provide," is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of contractor, "provide" is implied.
- C. Unless stated otherwise in the contract documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the contract documents in accordance with such recognized meaning.

1.90. Abbreviations, Acronyms, and Symbols:

Reference, Design Standards and Abbreviations: Any reference to published specifications or standards of any organization or association or as noted in Florida Building Code, Chapter 2, and Florida Fire Prevention Code are applicable; and shall comply with the requirements of the specification or standard which is current on the date of Advertisement for Bids. In case of a conflict between the referenced specifications or standards, the one having the more stringent requirements shall govern.

Documents listed shall be standard references currently in effect at project commencement.

In case of conflict between the referenced specifications or standards and the Contract Documents, the Contract Documents shall govern.

A. ABBREVIATIONS, REFERENCE STANDARDS, AND ACRONYMS

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| AA | Aluminum Association |
| AAA | American Arbitration Association |
| AABC | Associated Air Balance Council |
| AAMA | Architectural Aluminum Manufacturers Association |
| AASHO | American Association of State Highway Officials |
| ABA | American Bar Association |
| ABMA | American Boiler Manufacturers Association |
| ABPA | Acoustical and Board Products Association |
| ACI | American Concrete Institute |
| ACPA | American Concrete Pipe Association |
| ACR | Attenuation-to-Crosstalk Ratio |
| ADA | Americans with Disabilities Act |
| AEIC | Association of Edison Illuminating Companies |
| AFBMA | Anti-Friction Bearing Manufacturers Assoc. |
| AFF | Above finished floor |
| AGA | American Gas Association |
| AGC | Associated General Contractors of America |
| AGMA | American Gear Manufacturers Association |
| AHA | American Hardboard Association |
| AI | The Asphalt Institute |
| AIA | American Institute of Architects |
| AIA | American Insurance Association |
| AIMA | Acoustical and Insulating Materials Association |
| AISC | American Institute of Steel Construction |
| AISI | American Iron and Steel Institute |
| AITC | American Institute of Timber Construction |
| AMCA | Air Moving and Condition Association |
| ANSI | American National Standard Institute |
| ANSI/UL263 | Fire Tests of Building Construction and Materials. |
| ANSI/UL723 | Surface Burning Characteristics of Building Materials. |

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| ANSI/UL1479 | Fire Tests of Through Penetration Firestops. |
| ANSI/UL2079 | Tests for Fire Resistance of Building Joint Systems. |
| APA | American Plywood Association |
| API | American Petroleum Institute |
| APWA | American Public Works Association |
| AREA | American Railway Engineering Association |
| ARI | American Refrigeration Institute |
| ASA | American Standards Association (Now ANSI) |
| ASAHC | American Society of Architectural Hardware Consultants |
| ASCE | American Society of Civil Engineers |
| ASHRAE | American Society of Heating, Refrigerating and Air Conditioning Engineers |
| ASME | American Society of Mechanical Engineers |
| ASSCBC | American Standard Safety Code for Building Construction |
| ASSHTO | American Association of State Highway Transportation Officials |
| ASTM | American Society for Testing and Materials |
| ASTM/D16 | Definitions of Terms Relating to Paint, Varnish, Lacquer, and Related Products for interpretation of terms used herein. |
| ASTM/D4442 | Test Method for Moisture Content of Wood. |
| ASTM/E-84 | Surface Burning Characteristics of Building Materials. |
| ASTM/E119 | Fire Tests of Building Construction & Materials |
| ASTM/E814 | Fire Tests of Through Penetration Fire Stops, |
| ASTM/E1966 | Test Method for Fire Resistive Joint Systems. |
| ASTM/E1399 | Test Method for Cyclic Movement & Measuring Minimum & Maximum Joint Widths of Architectural Joint Systems |
| AWG | American Wire Gauge |
| AWI | Architectural Woodwork Institute |
| AWPA | American Wood Preservers Association |
| AWPB | American Wood Preservers Bureau |
| AWPI | American Wood Preserves Institute |
| AWS | American Welding Society |
| AWWA | American Water Works Association |
| BHMA | Builders Hardware Manufacturers Association |
| BIA | Brick Institute of America (formerly SCPI) |
| BD | Building distributor (replacing main-cross connect and MDF as "building service" room identifiers). |
| BICSI® | Building Industry Consulting Service International, Inc. |
| BTU | British Thermal Unit. |
| CATV | Community Antenna Television (cable television). |
| CD | Campus distributor (replacing main-cross connect and MDF as "campus-wide service" room identifiers). Also, compact disk for storage of audio or video information. |
| dB | Decibel. |
| CDA | Copper Development Association |
| CFS | Cubic Feet Per Second |
| CMAA | Crane Manufacturers Association of America |
| CRSI | Concrete Reinforcing Steel Institute |
| CS | Commercial Standard |
| DHI | Door and Hardware Institute |
| DIPRA | Ductile Iron Pipe Association |
| DOT Spec | Standard Specification for Road and Bridge Construction Florida Department of Transportation, 1982 |
| E/A | Engineer and/or Architect |
| EDA | Economic Development Association |
| EEL | Edison Electric Institute |
| EF | Entrance Facility |



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| EIA | Electronic Industries Alliance | NECA | National Electrical Contractors' Assoc |
| ELFEXT | Equal Level Far-End Crosstalk | NEMA | National Electrical Manufacturers' Association |
| EMC | Electromagnetic Compatibility. | NESC | National Electric Safety Code, C2-1997. |
| EMI | Electromagnetic Interference. | NFPA | National Fire Protection Association |
| EMT | Electrical metallic tubing. | NLA | National Lime Association |
| ENT | Electrical nonmetallic tubing. | NPC | National Plumbing Code |
| EPA | Environmental Protection Agency | NPT | National Pipe Threads |
| EPDM | Ethylene-polypropylene-diene membrane | NR | Network Room |
| ER | Equipment Room. Replacing "TR" | NRTL | National Recognized Testing Laboratory |
| FCC | Federal Communications Commission | NSC | National Safety Council |
| FCI | Fluid Control Institute | NSF | National Sanitation Foundation |
| FD | Floor distributor (replacing network room, intermediate and horizontal cross-connect, and telecommunications as "building service" room identifiers). Also, Floor Drain as part of building plumbing system | OD | Outside Diameter |
| FDDI | Fiber Distribution Data Interface. | OSHA | U. S. Department of Labor, Occupational Safety and Health Administration |
| FDER | Florida Department of Environmental Regulation | OCP | Outside Cable Plant. |
| FDOT | Florida Department of Transportation | OTDR | Optical Time Domain Reflectometer |
| Fed Spec | Federal Specification | PCA | Portland Cement Association |
| FEXT | Far-End Crosstalk | PCI | Prestressed Concrete Institute |
| FMC | Flexible metallic conduit | PR | Pair |
| FOTP | Fiber Optic Test Procedure | PS | United States Products Standards |
| FPL | Florida Power and Light | PSI | Pounds per Square Inch |
| FPS | Feet Per Second | PSIA | Pounds per Square Inch Atmosphere |
| Freq | Frequency | PSIG | Pounds Per Square Inch Gauge |
| FS | Federal Standards | RCDD® : | Registered Communications Distribution Designer |
| GA | Gypsum Association | RPM | Revolutions Per Minute |
| GE | Grounding Equalizer | RFI: | Radio Frequency Interference |
| Gnd | Ground | RH | Relative Humidity. |
| GPM | Gallons Per Minute | RNC | Rigid nonmetallic conduit. |
| HB | Handbox. Also, hose bibb for water supply part of plumbing system. | SAE | Society of Automotive Engineers |
| HC | Horizontal Cross-Connect (replaced by floor distributor "FD") | SDI | Steel Decks Institute |
| HH | Handhole | SIGMA | Sealed Insulating Glass Manufacturer's Association |
| HMI | Hoist Manufacturers Institute | SJI | Steel Joists Institute |
| HP | Horsepower | SMACNA | Sheet Metal and Air Conditioning Contractors' National Association |
| HSBII | Hartford Steam Boiler Inspection and Insurance Co. | SM | Single Mode |
| HVAC | Heating, Ventilation, and Air Conditioning | SSI | Scaffolding and Shoring Institute |
| Hz | Hertz | SSPC | Steel Structures Painting Council |
| IC | Intermediate Cross-Connect (replaced by building distributor "BD"). | SSPC | Structural Steel Painting Council |
| ID | Inside Diameter | STA | Station (100 feet) |
| IDC | Insulation Displacement Connectors | TAS | Technical Aid Series |
| IEEE | Institute of Electrical and Electronic Engineers | TBB | Telecommunication Bonding Backbone |
| IFI | Industrial Fasteners Institute | TCA | Tile Council America |
| IMC | Intermediate metal conduit | TDH | Total Dynamic Head |
| IPCEA | Insulated Power Cable Engineers Association | TE | Telephone Equipment (Wall Mounted Equipment Rack) |
| IPS | Iron Pipe Size | TGB | Telecommunications Grounding Buss Bar |
| ISO | International Organization for Standardization | TH | Total Head |
| ISP | Inside Cable Plant | TIA | Telecommunications Industry Association. |
| LFMC | Liquidtight flexible metal conduit | TMGB | Telecommunications Main Grounding Buss Bar |
| LFNC | Liquidtight flexible nonmetallic conduit | UBC | Uniform Building Code |
| Mbps | Megabits per second. | UL | Underwriter's Laboratories, Inc. |
| MER | Main Equipment Room | UOM | Units of Measure-Weights and Measures shall be as identified by Weights and Measures Division, NIST, U. S. Department of Commerce, 100 Bureau Dr., Stop 2600, Gaithersburg, MD 20899-2600. |
| MF | Factory Mutual System | UPS | Uninterruptible Power Supply |
| MGD | Million Gallons Per Day | USASI | United States of American Standards Institute |
| MH | Maintenance Hole | WAO | Work Area Outlet |
| MHI | Materials Handling Institute | | |
| MIL | Military Specification | | |
| MMA | Monorail Manufacturers Association | | |
| MHz | Megahertz | | |
| NBFU | National Board of Fire Underwriters | | |
| NBHA | National Builders' Hardware Association | | |
| NBR | Acrylonitrile-butadiene rubber | | |
| NBS | National Bureau of Standards | | |
| NCSA | National Crushed Stone Association | | |
| NCSPA | National Corrugated Steel Pipe Assoc | | |
| NEC | National Electrical Code | | |

B. ITSA/WARNOCK-HERSEY - PRODUCT DIRECTORY

- NFPA 101: Life Safety Code - National Fire Protection Association (NFPA).
- NFPA 70: National Electrical Code - National Fire Protection Association (NFPA).
- ANSI/NECA/BICSI-568-2001 "Installing Commercial Building Telecommunications Cabling".



ANSI/TIA/EIA-568-B.1 and addenda "Commercial Building Telecommunications Cabling Standard - Part 1: General Requirements".

ANSI/TIA/EIA-568-B.2 and addenda "Commercial Building Telecommunications Cabling Standard - Part 2: Balanced Twisted-Pair".

ANSI/TIA/EIA-568-B.3 and addenda "Commercial Building Telecommunications Cabling Standard - Part 3: Optical Fiber Cabling and Components Standard".

ANSI/TIA/EIA-569-B and Addenda "Commercial Building Standard for Telecommunications Pathways and Spaces".

ANSI/TIA/EIA-606-A and Addenda "Administration Standard for Telecommunications Infrastructure of Commercial Buildings".

ANSI-J-STD-607-A and Addenda "Commercial Building Grounding (Earthing) and Bonding Requirements for Telecommunications".

ANSI/TIA/EIA-526-7 and Addenda "Measurement of Optical Power Loss of Installed Single-Mode Fiber Cable Plant".

ANSI/TIA/EIA-526-14A and Addenda "Optical Power Loss Measurements of Installed Multimode Fiber Cable Plant".

ANSI/TIA/EIA-758 "Customer Owned Outside Plant Telecommunications Cabling Standard".

IEC/TR3 61000-5-2 - Ed. 1.0 and amendments. "Electromagnetic compatibility (EMC) - Part 5: Installation and mitigation guidelines – Section Earthing and cabling".

ANSI/NFPA 70 National Electrical Code, 2008 Edition.

BICSI Telecommunications Distribution Methods Manual (TDMM).

BICSI Telecommunications Cabling Installation Manual (TCIM).

BICSI Customer-Owned Outside Plant Design Manual, 3rd, Edition (CO-OSP).

Applicable Martin County Codes and Regulations.

Underwriters Laboratories (UL).

FCC -Federal Communications Commission.

Occupational Safety and Health Regulations (OSHA).

Florida Fire Protection Code (including NFPA 101 Life Safety Code).

Applicable Florida Statutes and Administrative Rules.

Manufacturers Training Manuals (Design and Installation).

NACE (National Association of Corrosion Engineers) - Industrial Maintenance Painting.

NPCA (National Paint and Coatings Association) - Guide to U.S. Government Paint Specifications.

PDCA (Painting and Decorating Contractors of America) - Painting - Architectural Specifications Manual.

SSPC (Steel Structures Painting Council) - Steel Structures Painting Manual.

- SSPC-SP 1 – Solvent Cleaning.
- SSPC-SP 2 – Hand Tool Cleaning.
- SSPC-SP 3 – Power Tool Cleaning.
- SSPC-SP 13 – Nace No 6 Surface Preparation for Concrete.

UL Underwriters Laboratories Fire Resistance Directory.

Note: Additional abbreviations and symbols are shown on the Drawings.



SECTION II
INSTRUCTIONS TO BIDDERS

1. REQUIREMENTS FOR PERSONNEL ENTERING DISTRICT PROPERTY:

Possession of firearms will not be tolerated in or near school buildings. Nor will violations of Federal or State Laws and any applicable District policy regarding Drug Free Workplace be tolerated. Violators shall be subject to immediate termination. "Firearm" means any weapon (including a starter gun or antique firearm) which will, is designed to, or may readily be converted to expel a projectile by the action of an explosive; the frame or receiver of any such weapon; any destructive device; or any machine gun.

No person who has a firearm in their vehicle may park their vehicle on District property. Furthermore, no person may possess or bring a firearm on District property.

If any employee of an awarded Proposer or subcontractor is found to have a firearm on District property, said employee shall be terminated from the project. If the awarded Proposer or subcontractor fails to ensure that said employee is restricted from the project may result in contract cancellation and/or termination.

Proposers are advised that they are responsible to ensure that no employee, agent or representative of their company who has been convicted or who is currently under investigation for a crime against children in accordance with section 435.04, Florida Statutes shall enter any school site.

Possession/use and/or being under the influence of any illegal mind-altering substances, such as, but not limited to alcohol and/or substances delineated in Chapter 893, Florida Statutes, by Contractors' employees/independent Contractors or its Subcontractors' employees/independent Contractors will not be tolerated on School Board property. If any employee/independent Contractor is found to have brought and/or used or is under the influence of any illegal mind-altering substances as described above on School Board property, said employee/independent contractor shall be removed and terminated from the project by the Contractor. If a Subcontractor fails to terminate said employee/independent Contractor, the Contractor shall terminate its agreement with the Subcontractor for the project. If the Contractor fails to terminate said employee/independent Contractor or fails to terminate the agreement with the Subcontractor who fails to terminate said employee/independent Contractor, this Contract may be terminated by the School Board.

2. FINGERPRINTING, JESSICA LUNSFORD ACT:

Contractor, his subcontractors, vendors and suppliers who are to be permitted access to school grounds while students are present, or have direct contact with students or have access to or control of school funds shall obtain Level 2 background screening in accord with Florida Statute FS1012.465 – Jessica Lunsford Act.

- 2.1 Level 2 screening excludes personnel working on school district property where students are present who have criminal records that include sexual offender, sexual misconduct with developmentally disabled or mental health patients, terrorism, murder, kidnapping, lewd, lascivious or indecent acts or exposure, incest, child abuse or neglect.
- 2.2 Persons screened as noted above with other types of criminal history may be allowed on school grounds provided under following conditions:
- 2.3 Contractor, subcontractors, vendors and suppliers shall be under continuous direct supervision of school district employee or Level 2 screened and cleared employee as noted above.
- 2.4 Contractor, subcontractors, vendors and suppliers may be allowed on student occupied site if area of construction is isolated from students by continuous six foot high chain link fence separating work area and school.

- 2.5 Persons with current Level 2 clearance who are subsequently arrested for disqualifying offenses shall be disqualified from access to school sites and shall immediately surrender their Photo ID Badge to their employer who shall be responsible for returning badge to Martin County School District's Department of Human Resources within 48 hours of arrest or notice of arrest or criminal offense.
- 2.6 Persons failing to notify their employer and Martin County School District's Department of Human Resources within 48 hours of arrest will be charged with 3rd degree felony, punishable by up to five years imprisonment and \$1,000 fine.
- 2.7 Employers of persons having been arrested for disqualifying offenses who subsequently allows said employee to continue working on school property may also be charged with 3rd degree felony, punishable by up to five years imprisonment and \$1,000 fine.
- 2.8 Contractor, his subcontractors, vendors and suppliers working on school board sites shall be fingerprinted and obtain work badges.
- 2.9 Questions regarding fingerprinting or identification badge processing may be directed to District Personnel Department at (772)219-1255, Ext. 30296.
- 2.10 The fingerprint screening must be completed in advance of the awarded Bidder providing any services. The awarded Proposer shall bear the cost of acquiring the background screening required by Fla. Stat. 1012.32, and any fee imposed by the Florida Department of Law Enforcement to maintain the fingerprints provided with respect to the awarded Bidder and its employees. Awarded Bidder shall provide District with a list of its employees. Awarded Bidder shall update these lists in the event that any new employees are added and awarded Bidder agrees that new employees shall be fingerprinted. Awarded Bidder agrees that in the event any employee is convicted of a criminal offense, the awarded Bidder shall notify the District within forty-eight (48) hours.
- 2.11 The parties agree in the event that the awarded Bidder fails to perform any of the duties described in the above paragraph, this shall constitute a breach of the contract entitling the District to terminate immediately with no further responsibility to make payment or perform any other duties under this contract. Awarded Bidder agrees to indemnify and hold harmless the District, its officers and employees from any liability whatsoever resulting from awarded Bidder's failure to comply with the requirements of this paragraph or Fla. Stat. 1012.32 and 1012.465.

3. QUALIFICATIONS OF BIDDERS:

To demonstrate qualifications to perform the Work, each Bidder must be prepared to submit within five (5) calendar days of District's request written evidence acceptable to the District documentary evidence demonstrating, financial data/fiscal responsibilities, previous experience, present commitments and other such data as may be called for to meet all of the Bidder's obligations set forth in the Bid documents. Each Bid must contain evidence of Bidder's qualifications to do business in the State of Florida or obtain such qualification prior to award of the contract.

The District reserves the right to contact any of the firms listed by Bidders in any sections as references or any additional firms or individuals to review Bidder's qualifications. Bids that do not comply with these requirements may be rejected at the option of the District.

The project shall be constructed by a firm with the primary qualifying agent licensed as a Contractor pursuant to and as



defined by Florida Statute 489, and shall have been employed full time by the construction firm for at least one year prior to this project's bid date.

4. **ANNUAL APPROPRIATION:** This Bid is conditional upon the District having funding to implement the Contract.
5. **DEFINED TERMS:** Terms used in these Instructions to Bidders, have the meanings assigned to them in the Industry involved in the subject matter of the Bid, in the Martin County School District, Standard General Conditions of the Construction Contract.
6. **COST OF BID:** Costs, either direct or indirect, incurred by the Bidder in the preparation, presentation, demonstration, delivery or for any other reason associated with the submittal of this bid is solely the responsibility of the Bidder and not the District, and are not to be charged to the District.
7. **BACKGROUND INVESTIGATION:** As a part of the Bid evaluation process, the District may conduct a background investigation, including a criminal record check of Bidder's officers and/or employees, by the Sheriff's Office to establish the competency, responsibility, qualifications and financial ability of the Bidders, proposed subcontractors and other persons and organizations to do the work in accordance with the Contract Documents to the District's satisfaction within the prescribed time. The Board reserves the right to reject the Bid of any Bidder who does not pass any such evaluation to the District's satisfaction.

The Bidder's signature on the Bid Form constitutes acknowledgement of and consent to such investigation. The District shall be the sole judge in determining the Bidder's qualifications.

8. **FACILITIES:** The District reserves the right to inspect the Bidder's facilities at any reasonable time, prior to award of the Bid, during normal working hours, with prior notice to determine that it has a bona fide place of business, and is a responsible Bidder.

The District also reserves the right to inspect all facilities of any subcontractor in order to make determination as to the foregoing. The subcontractor shall be equally responsible for meeting all requirements specified in the Invitation to Bid.

9. **INQUIRIES/AVAILABILITY:** Inquiries concerning this ITB should be made in writing. The District will respond to written inquiries, if received at least seven (7) calendar days prior to the date scheduled for opening the bids. The District shall record its responses to inquiries and any supplemental instructions in the form of a written addendum. If addenda are issued, the District **shall make every attempt to issue such addenda** at least seven (7) calendar days before the date fixed for receiving the proposals. **Written addenda shall be disseminated via the Vendor Registry and DemandStar.** No interpretation shall be considered binding unless provided in writing to the Martin County School District Purchasing Department. **It is the sole responsibility of the Bidder to ensure all addenda are received.**

CONTACT WITH MARTIN COUNTY SCHOOL DISTRICT PERSONNEL OTHER THAN PURCHASING STAFF OR A DESIGNATED REPRESENTATIVE REGARDING THIS INVITATION TO BID SHALL BE GROUNDS FOR ELIMINATION FROM THE PROCESS.

10. **INTERPRETATIONS AND ADDENDA:** All Bidders shall carefully examine the Bid Documents. Any ambiguities or inconsistencies should be brought to the attention of the Purchasing Department through written communication prior to opening of the bids. Failure to do so on the part of the Bidder shall constitute an acceptance by the Bidder of any subsequent decision by the District. MCSD will receive written requests for clarification

concerning the meaning or interpretation of this ITB by issuance of addenda via DemandStar and Vendor Registry, until (7) days prior to the bid opening date. Questions shall be emailed to bids@martinschools.org with reference to the ITB number in the subject for faster recognition only questions answered by formal written Addenda issued by the MCSD Purchasing Department shall be binding. Oral and other interpretations or clarifications shall be without legal effect.

It is the sole responsibility of the Bidder to ascertain whether any addenda to this Invitation to Bid has been issued, and to submit all such addenda properly acknowledged with the Bid response.

The District may delay scheduled due dates if it is to the advantage of the District. The District shall notify Bidders of all changes in scheduled due dates by written addenda.

11. **BID DOCUMENTS:** Solicitation Documents may be obtained by registering with DemandStar in order to receive all required documents and notification of addenda. Register for FREE at <http://www.demandstar.com/subscriptions> "FREE AGENCY", toll-free 1-800-711-1712, or from Vendor Registry at www.vendorregistry.com. Bidders who obtain solicitation documents from any other source are cautioned that the solicitation package may be incomplete.

Complete sets of Bid Documents shall be used in preparing Bids. Neither District nor EOR assumes and each disclaims any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bid Documents.

District and EOR in making copies of Bid Documents available on the above terms do so only for the purpose of obtaining bids on the Work and do not confer a license or grant for any other use.

12. **UNIT PRICES:** Where a discrepancy between unit price and total price is indicated on a Bidder's submitted Schedule of ITB Prices or Bid Form, the unit prices shall prevail.
13. **IRREGULARITIES:** Bids not meeting stated minimum terms and qualifications may be rejected by the District as non-responsive or irregular. However, the District reserves the right to waive any irregularities, technicalities or informalities in any bid. The District reserves the right to allow for the clarification of questionable entries and for the correction of typographical and mathematical errors.
14. **BID SUBMISSION:** Bidder should submit their bid indicating their name and Project Name, ITB Number, and time and date of the ITB opening. The submission of bids shall be submitted electronically through www.DemandStar.com or bids@martinschools.org by Bidders responding to this ITB no later than the designated deadline date and time. A Bidder's failure to submit as required before the deadline shall cause their bid submittal to be disqualified. Late bids will be retained unopened.

14.1 All submittals must be compatible with Microsoft Office or Portable Document Format (PDF). The Bidder can only view/submit his/her Electronic Submittal and will not have access to any other Bidder's submittals. The Bidder's Electronic Submittal may be changed at the Bidder's discretion until the ITB Due Date and Time is reached. The Bidder will no longer be allowed to change or have access to the electronic submittal after the ITB Due Date and Time as the District will open all bids on said date. Any Bidder who is submitting an Electronic Submittal for the first time is strongly encouraged to contact DemandStar by e-mailing questions to demandstar@demandstar.com.

14.2 Submit the entire Bid Package by completing and returning all required documents. All submittals are required to be electronic and be contained in one (1) file. No hard copies will be accepted.



- 14.3 Bids, once opened, become the property of the District and shall not be returned to the Bidders. Upon opening, bids become "public records" and shall be subject to public disclosure in accordance with Chapter 119, Florida Statutes.
- 14.4 Offers by facsimile, telegram, or telephone are **not** acceptable. All Bidders and their representatives are invited to attend. Bid tabulations are posted online at www.demandstar.com or www.vendorregistry.com.
- 14.5 Bids will be opened and read aloud publicly at the time and place indicated in the Invitation to Bid. Submittal of a Bid in response to this Invitation to Bid constitutes an offer by the Bidder
- 14.6 Should there be a tie on either the unit price (if awarded on a per item basis), sections of the solicitation (i.e.: building contracts, or solicitations awarded by section) or the whole solicitation ("all or none" solicitations or service solicitations), the deadlock will be decided upon using the following order:
- Companies who certify they are a drug-free workplace.
 - Companies located in Martin County, Florida.
 - Companies located in Florida.
 - The company receiving the larger dollar award on other items within the solicitation.
 - All else being equal, a coin toss will be made to decide the award.
- This does not preclude the possibility of splitting an order if it is in the best interest of the School Board.
- 14.7 All Bids shall remain subject to acceptance for ninety (90) calendar days after the day of the Bid opening, but the District may, at the sole discretion of the District, release any Bid and return the Bid Security prior to that date.
- 14.8 It is the sole responsibility of the Bidder to assure that his or her submittal is uploaded to DemandStar or bids@martinschools.org on or before the ITB Due Date and Time. The District shall in no way whatsoever be responsible for any delays caused by any power outages or internet failures. No exceptions will be made.

15. **MODIFICATION OF BIDS:** Bids may only be modified, by an appropriate document duly executed, prior to the solicitation closing date and time. The Bidder must present certification to assure that they are indeed an authorized representative of the Bidder's firm at the time modification to the Bid is presented.
16. **BID FORM:** Bids must be submitted on the prescribed form; all blank spaces must be filled in as noted, in ink or typed with amounts extended and totaled. Where indicated on the Bid Form, items shall be stated in numbers. Bidders are required to bid all items to be considered. Bidder should not reference the words "No charge, N/A, included, etc." on any of the line items. Vendor must identify a monetary amount for each line item. If vendor is not providing a bid price for an item, zero (0) must be designated on that line item. Failure to identify a monetary amount for each item may cause Bidder's bid response to be considered non-responsive and rejected.

The District reserves the right to accept any Bid or combination of Bid alternates, reject any and all Bids, waive any and all informalities, minor irregularities, to accept any item or group of items unless qualified by Bidder; to acquire additional quantities at prices quoted on the Invitation to Bid unless additional quantities are not acceptable, in which case the bid sheets must be noted "BID IS FOR SPECIFIED QUANTITY ONLY, and the right to disregard all nonconforming, non-responsive, unbalanced or conditional Bids or counter-proposals. In addition, the District reserves the right to make a multiple award if it is in the best interest of the District.

Failure to provide all of the information required to accompany the Bid, Bid Form and Specifications shall be considered a serious omission, which may result in the bid being rejected as non-conforming.

The Bid shall contain acknowledgment of receipt of all addenda (copies of which shall be attached to the Bid Form).

17. **BID TABULATION:** Bid tabulations shall be posted on www.DemandStar.com and Vendor Registry within ten (10) days after the bid opening.
18. **EVALUATION FACTORS:** The District reserves the right to reject the Bid of a non-responsible Bidder that the District determines is of doubtful financial ability or fails to meet any other pertinent standard or criteria established by the District. Further, A Bidder must be, at the time of the Bid opening, a fully authorized agent or representative of the product or service Bid, and capable of producing, providing or installing the items Bid, and so certify upon request.

The District shall consider the firms qualifications, compliance of requirements, and time of completion as evaluation factors. In addition, the District may require the apparent successful Bidder to submit a Schedule of Values priced in line item format including time frames (not dated) for staff to review prior to staff's actual award recommendation being submitted to the District Board.

Any inconsistencies shall be brought to the attention of the intended awardee for adjustment prior to award and acceptance of said schedule. An unbalanced Schedule of Values may result in rejection of the bid as non-responsible. Failure to produce said Schedule of Values within four (4) business days of the District's request may result in the bid being rejected as non-responsive.

The District may consider the qualifications and experience of subcontractors and other persons and organizations (including those who are to furnish the principal items or material, services, or equipment) proposed for those portions of the work as to which the identity of subcontractors and other persons and organizations must be submitted.

The District may also consider the operating costs, maintenance requirements, performance data and guarantees of major items of materials and equipment proposed for incorporation in the Work when such data is required to be submitted prior to the Notice of Tentative Award.

19. **AWARD OF CONTRACT:** The District reserves the right to award item by item, and/or group by group or on an all or none basis to the lowest responsive, responsible Bidder that provides the best value to the District.

NO AWARD RECOMMENDATION SHALL BE BROUGHT BEFORE THE BOARD FOR CONSIDERATION TO AWARD UNTIL THE CONTRACTOR/BIDDER HAS PRESENTED A SIGNED ORIGINAL OF THE CONTRACT OR PURCHASE ORDER ALONG WITH ANY OTHER REQUIRED DOCUMENTS TO THE PURCHASING DEPARTMENT.

NO AWARD SHALL BE DEEMED FINAL AND SHALL BE DEEMED CONDITIONAL, UNTIL THE PARTIES HAVE FULLY EXECUTED THE AGREEMENT(S) OR A PURCHASE ORDER HAS BEEN ISSUED BY THE BOARD TO THE BIDDER. THE BOARD RESERVES THE RIGHT TO REVOKE ANY AWARD MADE HEREUNDER, WITHOUT PENALTY, PREMIUM OR OBLIGATION, AT ANY TIME PRIOR TO THE DELIVERY OF THE FULLY EXECUTED AGREEMENT(S) OR PURCHASE ORDER. NO BIDDER SHALL BE ENTITLED TO RELY ON ANY ANNOUNCEMENT OF AN AWARD, AND THE BOARD SHALL IN NO WAY BE ESTOPED IN THE REVOCATION OF AN AWARD PREVIOUSLY GRANTED.

Section 119.071(1)(b)2., F.S., provides an exemption for "sealed bids, proposals, or replies received by an agency pursuant to a competitive solicitation" until such time as the agency provides notice of an intended decision or until 30 days after opening "the bids, proposals, or final replies," whichever is earlier.



20. **DIRECT MATERIAL PURCHASES:** The District reserves the right to issue purchase orders for materials to either the Contractor's or the District's suppliers for construction related materials.

21. **CONTRACTUAL AGREEMENT:** The submission of your Bid constitutes a firm offer by the Bidder. Upon acceptance by the Board, the Purchasing Department shall issue a notice of award and purchase order(s) and/ or contract for any supplies, equipment and/or services as a result of this bid. The Invitation to Bid and the corresponding purchase order(s) and /or contract shall constitute the complete agreement between the successful Bidder and the Board. Unless otherwise stipulated in the bid documents or agreed to in writing by both parties, no other contract documents shall be issued or accepted.

The District may attach as a part of this solicitation, a Sample Contract document. Bidders shall be responsible for complying with all of the terms and conditions of the Sample Contract document, except where variant or conflicting language may be included in any Special Conditions contained herein. Bidders shall note any deviation or variance with the Sample Contract document at the time of bid submission. Should no revisions be noted, the District will assume and the Contractor agrees that the terms and conditions of agreement are acceptable.

22. **CONTRACT TERMS:**

- a. A contract resulting from this document shall be governed in all respects as to validity, construction, capacity, performance, or otherwise by the laws of the State of Florida.
- b. Contractors providing service under this contract assure the School Board that they are conforming to and otherwise complying with the following, as applicable:
 - The Civil Rights Act of 1964, as amended.
 - Clean Air and Water Pollution Acts, 42 U.S.C. 7401-7671q.
 - Federal Water Pollution Control Act, 33 U.S.C. 1251-1387.
 - Executive Order 11738.
 - EPA Regulation, 40 CFR Part 15, which prohibits the use under non-exempt federal contracts, grants or loans of facilities included on the EPA list of violating facilities.
 - Federal, state and local laws and regulations, including the Davis-Bacon Act, pertaining to wages, hours and conditions of employment and 2CFR 200.317 – 200.326, if applicable.
 - Energy Policy and Conservation Act, 42 U.S.C. 6201.
 - Funding Agreement (Rights to Inventions) 37 CFR Part 401.
 - Recovered Materials Section 6002 of Environmental Protection Agency (EPA) at 40 CFR Part 247.
 - Equal Employment Opportunity, 41 CFR Part 60.
 - Copeland "Anti-Kickback" Act, 40 U.S.C. 3145, as supplemented by the Department of Labor Regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by loans or grants from the United States".)
 - Contract Work Hours and Safety Standards Act, 40 USC 3702 and 3704, as supplemented by Department of Labor Regulations (29 CFR Part 5), as applicable.

23. **SIGNING OF CONTRACT:** The Notice of Tentative Award will be presented to the Successful Bidder. The Legal Department shall issue the contract within ten (10) calendar days thereafter, the Successful Bidder shall sign and deliver the required number of counterparts of the Construction Contract to District. Upon Board approval, the District shall request the required bonds and

insurance certificates. The aforementioned documents must be submitted to the District prior to any WORK being performed. After receipt of requested documents, the executed contract, purchase order, and notice to proceed will be presented to the Awarded Bidder. Each counterpart is to be accompanied by a complete set of the Drawings. By signing this contract, the Contractor certifies that it is in compliance with, and/or will comply with, the aforementioned terms specifically mentioned, as well as all other municipal, county, state and federal requirements and regulations.

24. **CONTRACT DEFAULT:** In the event the Contractor fails to enter into a contract with the School Board on the basis of the submittal, such action shall constitute a default of this agreement. Further default may be declared by the School Board if the Contractor violates the terms of the submitted document in any manner. Upon default of this agreement and/or any agreement resulting from this agreement, the School Board shall be entitled to pursue all remedies available at law and/or in equity, including, but not limited to, the recovery of damages equaling the difference of the submitted price and the price the School Board subsequently pays to secure performance from other sources. Damages may be assessed and deducted against any funds due and owing to the Contractor.

In the event any litigation occurs between the parties as a result of the contract, the prevailing party shall be entitled to recover reasonable attorney's fees and court costs for any such action.

At the discretion of the School Board, any Contractor found in default of this agreement and/or any agreement resulting from this agreement, shall be removed from the Contractor list for a period of up to three (3) years from the date of said default. Default under this agreement and/or any other agreement(s) in which the School Board has contracted with the Contractor, may also, at the discretion of the School Board, result in termination of any other such agreement(s).

25. **TERMINATION OF CONTRACT:** This contract may be terminated without liability to the School Board in whole or in part when it is deemed to be in the best interest of the School Board to so act. Notification of termination must be in writing and issued by the Director of Materials Management or designee. This contract may be terminated upon 30 days written notice. Further, at the discretion of the School Board, the contract may be terminated in a period of less than 30 days in the event of poor performance or violation of these terms. The Contractor shall have a period of time, as determined by the School Board, to remedy any noncompliance to offered terms and specifications. The School Board, upon termination, shall exercise its discretion to complete the balance of the contract consistent with the best interest of the School Board. The School Board delegates the authority to terminate the contract to the Superintendent or designee. At the discretion of the School Board, the Contractor may be removed from future solicitation opportunities for a period up to three (3) years.

26. **REJECTION / DISQUALIFICATION OF BIDDER:** The Board, at its sole discretion, reserves the right to reject any and all bids, accept any bid or any combination of bids or waive any minor irregularity or technicality in bids received, when in its sole judgment, it shall best serve public interest. The right is reserved to reject any and all Bids or to accept the one deemed by the DISTRICT to be the most advantageous. Contractor's bid shall be rejected as non-responsive if any of the following exist (this list is not all inclusive):

- More than one Bid from an individual, firm, partnership, corporation, or association under the same or different names shall not be considered.



- The District reserves the right to reject the bid of any Bidder in arrears or in default upon any debt or contract to the District or who have failed to perform faithfully any previous contract with the District or with other governmental jurisdictions.
- If there is reason to believe that collusion exists between Bidders.
- Bids that are judged to be mathematically or materially unbalanced shall be rejected.
- The Bid Package is found to have concealed or contained false and/or misleading information.
- Executed requested Attachments/Affidavits are not completed or submitted.
- Incomplete execution of documents, Bidder signature page, and Bid submittal form.
- Not licensed to perform the required work or provide the required product.
- Not eligible to bid due to violations listed under, Public Entity Crimes.
- Submission of an irregular bids. Failure to fill out forms completely, indicating compliance or deviation for each item may be used as reason for rejection.
- Non-compliance with applicable laws or contains any unauthorized additions or deletions or contains irregularities of any kind is considered incomplete, indefinite, or ambiguous as to its meaning.

27. **EXECUTION OF BID:** Bidders shall submit their bid response electronically as described above. For this purpose, all references herein to signing requirements or other required acknowledgments hereby include either a manual signature in blue ink or by electronic digital signature by an authorized officer of the proposing firm who is legally authorized to enter into a contractual relationship in the name of the Bidder. Bid must be typed or legibly printed in ink. Use of erasable ink is not permitted. All corrections made by Bidder to any part of the Bid document must be initialed in ink. The respondent agrees that the action of electronically submitting its response constitutes the following:

- An electronic signature on the responses.
- An electronic signature on any form or section specifically calling for a signature and
- An affirmative agreement to any statement contained in the solicitation that requires a definite confirmation or acknowledgement.
- Compliance to electronic signatures as specified in F.S. Chapter 668.

The bid submittal of a Statement of Bid by the Bidder shall be considered by the District as constituting an Offer by the Bidder to perform the required services.

Bids by corporations must be executed in the corporate name by the President or Vice President (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal shall be affixed and attested by the Secretary or Assistant Secretary. The corporate address and State of Incorporation shall be shown below the signature.

Bids by partnership must be executed in the partnership name and signed by a general partner, his title must appear under his signature and the official address of the partnership must be shown below the signature.

All names of persons signing documents must be typed or printed below the signature.

28. **NO BID:** If not submitting a Bid, please respond no later than the Bid opening date and time, by returning the acknowledgment, noting the reason for declining. An addendum may be issued to remedy providing the circumstances are determined reasonable.

29. **WITHDRAWAL OF BIDS:** All Bids shall be irrevocable unless the Bid is withdrawn as provided herein. All Bids may be withdrawn only by written communication delivered to the Purchasing Department prior to the solicitation closing date and time. The Bidder must present certification to assure that they are indeed an authorized representative of the Bidder's firm at the time such communication to withdraw the Bid is presented. A District representative shall verify this information prior to return of the Bid and Bid Security.

However, within twenty-four (24) hours after Bids are opened, any Bidder files a duly signed written notice with the District and successfully demonstrates that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid Security will be returned. Bidder shall be disqualified from further bidding on the WORK to be provided under the Bid Documents.

30. **CONFLICT OF INTEREST:** All Bidders must disclose with their Bid the name of each of its employees, agents, or relatives who are employees of the DISTRICT. The Bidder represents and warrants to the District the following:

- No officer, employee, or agent of the District has any interest, either directly or indirectly, in the business of the Bidder to be conducted hereunder.
- Bidder has not employed or retained any company or person, other than a bona fide employee working solely for the Bidder, to solicit or secure this contract, and that it has not paid, or agreed to pay any person, company, corporation, individual, or firm, other than bona fide Personnel working solely for the Bidder any fee, commission, percentage, gift or other consideration, contingent upon, or resulting from the award or making of this contract.
- Bidder acknowledges that it has not agreed as an expressed or implied condition for obtaining this contract, to employ or retain the services of any person, company, individual or firm in connection with carrying out this contract.
- Bidder represents that it presently has no interest, either direct or indirect, while performing the services required by this contract, which would conflict in any manner with Florida Statutes.
- Bidder represents that no person having any such interest shall be employed during the term of this contract, including any officer, employee or agent of the District.
- Bidder represents and warrants that it has no current contracts with any entity that would create any conflict of interest in the Bidder's ability to perform the services required by this contract. Further, the Contractor represents and warrants that throughout the term of this contract, it will not undertake any work that would create such a conflict in interest.

It is understood and agreed by the Bidder that, upon the breach or violation of this Section, the District shall have the right to terminate the contract without liability and at its sole discretion, and to deduct from the contract price, or to otherwise recover, the full amount of such fee, commission, percentage, gift or consideration paid by the Bidder.



The Bidder shall promptly notify the District in writing by certified mail or electronic mail of all potential conflicts of interest for any prospective business association, interest or other circumstance that may influence or appear to influence the Bidder's judgment or quality of services being provided hereunder. Such written notification shall identify the prospective business association, interest or circumstance, the nature of work that the Bidder may undertake and request an opinion of the District as to whether the association, interest or circumstance would, in the opinion of the District, constitute a conflict of interest if entered into by the Bidder. If, in the opinion of the District, the prospective business association, interest or circumstance would not constitute a conflict of interest by the Bidder, the District shall so state in the notification and the Bidder shall, at its option, enter into such association, interest or circumstance and it shall be deemed not in conflict of interest with respect to services provided to the District by the Bidder under the terms of this Contract.

31. **NON-COLLUSION:** By submitting a bid, the Bidder certifies that it has not divulged discussed or compared its Bid with other Bidders and has not colluded with any other Bidder or parties to a Bid whatsoever. No employee of the School Board has or shall benefit financially or materially from such solicitation or subsequent contract. Any contract issued as a result of this solicitation may be terminated at such time as it is determined that gratuities of any kind were either offered or received by any of the aforementioned persons. (Note: Premiums, rebates or gratuities are not permitted with, prior to, or after any delivery of material.) Any such violation shall result in the cancellation and/or return of materials (as applicable) as being non-conforming.

32. **PUBLIC ENTITY CRIMES:** The Bidder certifies that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by the State of Florida or Federal Government. Further, Bidder certifies that it has divulged, in its bid response information regarding any of these actions or proposed actions with other governmental agencies

Pursuant to Section F.S. 287.133, FS as amended: 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 Vendor, supplier, subvendor, or consultant under a Contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in F.S. 287.017 for CATEGORY TWO or higher for a period of 36 months from the date of being placed on the convicted vendor list.

The awarded Bidder or any subcontractor shall not employ any persons with multiple felonies and / or crimes against children. The awarded Bidder must provide documented proof of efforts to comply with this requirement. The Owner may declare any non-compliance or lack of diligent effort by the awarded Bidder to comply as a breach of contract and immediately terminate the services of the awarded Bidder.

Any employees involved in any F.S. Chapter [435](#), Florida Statutes offenses are precluded from continuing to work on a project and must be replaced. Failure to comply may result in the immediate termination of the awarded Bidder's contract at the sole discretion of the District. Lack of knowledge by the Bidder shall in no way be a cause for relief from responsibility.

33. **PUBLIC RECORDS:** Any material submitted in response to this Invitation to Bid shall become a public document pursuant to Section 119.07, FS. This includes material that the responding BIDDER might consider to be confidential or a trade secret. Any

claim of confidentiality is waived upon submission, effective after opening of Bids pursuant to Section 119.07, FS.

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 772. 219.1200, ext. 30201, 1939 SE Federal Highway, Stuart, Florida 34994 or click [here](#).

In compliance with F.S. 119.0701 the Contractor shall:

- Keep and maintain public records required by the public agency to perform the service.
- Upon request from the public agency's custodian of public records, provide the public agency 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 this chapter or as otherwise provided by law.
- 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 the contract if the contractor does not transfer the records to the public agency.
- Upon completion of the contract, transfer, at no cost, to the public agency all public records in possession of the contractor or keep and maintain public records required by the public agency to perform the service. If the contractor transfers all public records to the public agency upon completion of the 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 the contract, the contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the public agency, upon request from the public agency's custodian of public records, in a format that is compatible with the information technology systems of the public agency.
- A request to inspect or copy public records relating to a public agency's contract for services must be made directly to the public agency. If the public agency does not possess the requested records, the public agency shall immediately notify the contractor of the request, and the contractor must provide the records to the public agency or allow the records to be inspected or copied within a reasonable time.
- If a contractor does not comply with the public agency's request for records, the public agency shall enforce the contract provisions in accordance with the contract.
- A contractor who fails to provide the public records to the public agency within a reasonable time may be subject to penalties under F.S. 119.10.



- If a civil action is filed against a contractor to compel production of public records relating to a public agency's contract for services, the court shall assess and award against the contractor the reasonable costs of enforcement, including reasonable attorney fees, if:
 1. The court determines that the contractor unlawfully refused to comply with the public records request within a reasonable time; and
 2. At least eight (8) business days before filing the action, the plaintiff provided written notice of the public records request, including a statement that the contractor has not complied with the request, to the public agency and to the contractor.
 - A notice complies with subparagraph 2 above, if it is sent to the public agency's custodian of public records and to the contractor at the contractor's address listed on its contract with the public agency or to the contractor's registered agent. Such notices must be sent by common carrier delivery service or by registered, Global Express Guaranteed, or certified mail, with postage or shipping paid by the sender and with evidence of delivery, which may be in an electronic format.
 - A Contractor who complies with a public records request within eight (8) business days after the notice is sent is not liable for the reasonable costs of enforcement.
- 34 **LICENSES:** Bidders, both corporate and individual, must be fully licensed and certified for the type of work to be performed in the State of Florida at the time of receipt. The submittal of any bid from a Contractor that is not fully licensed and/or certified shall be rejected.
- 35 **PERMITS:** The Bidder(s) shall be responsible for obtaining any necessary permits and shall comply with laws, rules, and regulations whether state or federal and with all local codes and ordinances without additional cost to the District.
- 36 **SUNBIZ:** Bidders, both corporate and individual, must provide proof that their firm is registered with the Division of Corporations for the State of Florida.
- 37 **BUSINESS TAX RECEIPT:** Bidder shall comply with Business Tax Receipt requirements for their business location, if applicable. A copy of the business tax receipt or proof of exemption must be included with the submittal package, if applicable.
- 38 **BIDDER MAILING ADDRESS:** It is the responsibility of every Bidder to register and maintain their current registration information. Bidders that have received the ITB from DemandStar.com must maintain their information on the DemandStar database. Bidders that have received the ITB documents from Vendor Registry must maintain their information on their database. The information used by the Purchasing Department is maintained at <http://www.demandstar.com>. DemandStar shall be used to make notice of ITBs and other information to Bidders.
- 39 **ANTI-DISCRIMINATION:** The Bidder certifies that they are in compliance with the non-discrimination clause contained in Section 202, Executive Order 11246, as amended by Executive Order 11375 relative to equal employment opportunity for all persons without regard to race, color, religion, sex or national origin. The provisions of the ADA Act of 1990 pertaining to employment shall also be applicable.

The Bidder shall not discriminate on the basis of race, gender, gender identity or expression, religion, national origin, ethnicity, sexual orientation, age or disability in the solicitation, selection,

hiring, or treatment of sub-contractors, vendors, suppliers, or commercial customers. Bidder shall provide equal opportunity for sub-contractors to participate in all of its public sector and private sector sub-contracting opportunities. Bidder understands and agrees that violation of this clause is a material breach of the contract and may result in contract termination, debarment, or other sanctions.

- 40 **MINORITY BUSINESS PARTICIPATION:** The District strongly encourages the use of Minority/Woman owned business enterprises for participation as associates, joint ventures, prime Contractors, and subcontractors in contracting opportunities.
- 41 **JOINT BIDS:** In the event multiple proposers submit a joint Bid in response to the BID, a single proposer shall be identified as the Prime Vendor. If offering a joint Bid, Prime Vendor must include the name and address of all parties of the joint Bid. Prime Vendor shall provide all bonding and insurance requirements, execute any Contract, complete the **REQUIRED RESPONSE FORM** shown herein, and have overall and complete accountability to resolve any dispute arising within this contract. Only a single contract with one proposer shall be acceptable. Prime Vendor responsibilities shall include, but not be limited to, performing of overall contract administration, preside over other proposers participating or present at District meetings, oversee preparation of reports and presentations, and file any notice of protest and final protest as described herein. The Prime Vendor shall also prepare and present a consolidated invoice(s) for services performed. The District shall issue only one check for each consolidated invoice to the Prime Vendor for services performed. The Prime Vendor shall remain responsible for performing services associated with response to this BID.
- 42 **LOBBYING:** Contractors are hereby advised that they are not to lobby with any district personnel or board members related to or involved with this solicitation. Lobbying is defined as any action taken by an individual, firm, association, joint venture, partnership, syndicate, corporation, and all other groups who seek to influence the governmental decision of a board member or district personnel after advertisement and prior to the posted recommendation on the award of the Contract.
- Bidders are hereby advised they are not to lobby with any District personnel or board members related to or involved with this bid until recommendation for award. All oral or written inquiries must be directed through the Purchasing Department.
- Any Bidder or any individuals that lobby on behalf of Bidder during the time specified shall result in rejection / disqualification of said bid.
43. **BYRD ANTI-LOBBYING AMENDMENT:** Contractors that apply or propose for an award of \$100,000 or more must file the required certifications. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress with or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier, up to the non-Federal award.
44. **KICKBACKS:** Any Contractor giving or offering to any employee and/or official of the School Board, either directly or indirectly, any rebate, percentage of contract, money or other things of value as an inducement or intended inducement, in the procurement of this or any other solicitation, shall be deemed in violation of this agreement, in addition to being in violation of any other municipal, county, state and federal laws and/or ordinances.



45. **CONE OF SILENCE:** A cone of silence is hereby established for all competitive selection processes for the provision of goods and services. The cone of silence is designed to protect the integrity of the procurement process by shielding it from undue influences prior to the recommendation of contract award. This cone of silence shall be imposed on these procurements after advertisement of same.

The cone of silence prohibits any communication regarding a competitive solicitation process. The cone of silence commences after the advertisement of the competitive solicitations. Competitive procurements are advertised on the purchasing department's web page or in a newspaper of general circulation.

The cone of silence terminates at the time the School Board acts on a written recommendation from the purchasing department or planning and construction department regarding contract award; provided, however, that communications are permitted when the School Board receives public comment at the meeting when the recommendation is presented.

Section 119.071(1)(b)2., F.S., provides an exemption for "sealed bids, proposals, or replies received by an agency pursuant to a competitive solicitation" until such time as the agency provides notice of an intended decision or until 30 days after opening "the bids, proposals, or final replies," whichever is earlier.

The purchasing department and planning and construction department shall ensure that all solicitations include provisions describing the requirements and prohibitions of the cone of silence, including how a potential vendor, service provider, Bidder, lobbyist, or consultant may communicate with District personnel.

Any person, whether employed by the District or not, who knowingly violates a provision of this policy shall be prohibited from serving on a District competitive selection committee.

Violation of this policy by a particular Bidder, proposer, respondent, and/or representative may, at the discretion of the District, result in rejection of said Bidder, proposer, respondent, and/or representative's bid, proposal, or offer and may render any contract award to said Bidder, proposer, or respondent voidable.

In addition to any other penalty provided by law, violation of this policy by a District employee shall subject said employee to disciplinary action up to and including dismissal from service.

46. **ASSIGNMENT:** The successful Bidder shall not assign, transfer, convey, sublet, or otherwise dispose of the contract, or of any or all of its rights, title, or interest therein, or its power to execute such contract to any person, firm, or corporation without prior written consent of the District.

47. **SUBCONTRACTING:** If an awarded Bidder intends to subcontract any portion of the Contract for any reason, the name and address of the subcontracting firm must be submitted along with the Bidder's bid or prior to work for approval. The Purchasing Department reserves the right to reject a subcontractor who previously failed in the proper performance of a contract or failed to deliver on-time contracts of a similar nature, or who, the DISTRICT has determined in its sole discretion, is not in the position to perform the contract due to the subcontractor's size, experience, or resources.

In addition, the awarded Bidder's subcontractors shall comply with all requirements of Fla. Stat. 1012.32 and 1012.465 by completing the fingerprint screening required of the awarded Bidder and all of its employees /subcontractors who provide services under this contract.

If requested by the District or EOR, Contractor shall provide an experience statement with pertinent information regarding similar projects and other evidence of qualification for each

Subcontractor, Supplier, person or organization. If the District or EOR after due investigation has reasonable objection to any proposed Subcontractor, Supplier, other person or organization, either may, before the Notice of Tentative Award is given, request the apparent Successful Bidder to submit an acceptable substitute without an increase in Bid price.

If the apparent Successful Bidder declines to make any such substitution, the District may award the contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers and other persons and organizations. The declining to make requested substitutions **shall constitute grounds** for sacrificing the Bid Security of any Bidder. Any Subcontractor, Supplier, other person or organization listed and to whom the District or EOR does not make written objection prior to the giving of the Notice of Tentative Award will be deemed acceptable to the District and EOR subject to revocation of such acceptance after the Effective Date of the Contract as provided in Section 6.5 of the Supplementary Conditions. Subcontractors shall not be changed without the approval of the District and the EOR. No acceptance by the District or EOR of any such Subcontractor, Supplier or other person or organization shall constitute a waiver of any right of the District or EOR to reject defective Work or materials not conforming to these specifications.

In contracts where the Contract Price is on the basis of Cost-of-the-Work Plus a Fee, the apparent Successful Bidder, prior to the Notice of Tentative Award, shall identify in writing to the District those portions of the Work that such Bidder proposes to subcontract and after the Notice of Tentative Award the Successful Bidder may only subcontract other portions of the Work with the District's written consent.

No BIDDER shall be required to employ any Subcontractor, other person or organization against which Bidder has reasonable objection.

48. **REPRESENTATIVE:** At all times during the term of the contract, the successful Contractor shall act as an independent Contractor and at no time shall be considered an agent or partner of the District.

49. **BONDING GUARANTY/EVIDENCE:** The Bid submittal **must** be accompanied by a notarized letter from your firm's Surety guaranteeing that if your firm is awarded a contract, the Surety will issue a letter of credit that attests to the bonding capacity (the maximum amount of surety credit a surety company) will provide to a contractor, contingent upon a top-notch organization, strong financial presentation, and experience. The Surety shall also guarantee your firm by issuing Performance and Payment bonds as required by the District. Failure to submit the Surety Guaranty letter with your Bid shall cause your bid to be rejected as non-responsive. The District shall be the sole judge in determining Bonding Capacity.

50. **PROPOSAL AS PUBLIC DOMAIN:** All documents and other materials made or received in conjunction with this project will be subject to public disclosure requirements of chapter 119, Florida Statutes. This includes material that the responding Proposer might consider to be confidential or a trade secret. The proposal will become part of the public domain upon opening. **Respondents shall not submit pages marked "proprietary" or otherwise "restricted".**



SECTION III

GENERAL TERMS AND CONDITIONS

These general terms and conditions apply to all offers made to the Martin County School District by all prospective Bidders, including but not limited to, Request for Quotes, Invitations to Bid, and Request for Proposals. As such the words "RFP", "Bid", and "Proposal" are used interchangeably in reference to all offers submitted by prospective Bidders.

Where there appears to be variances or conflicts between the General Terms and Conditions, Supplementary Conditions, and the Special Conditions and/or Detailed Specifications outlined in this ITB, Section III, General Terms and Conditions, Item #2, Order of Precedence shall prevail.

1. **TERM CONTRACT:** At all times during the term of the contract, the successful Contractor(s) shall act as an independent Contractor and at no time shall be considered an agent or partner of the District.
 - 1.1 **Contract Period:** This contract shall be firm for one (1) year, subsequent to approval by the proper District authorities. The contract may be renewed for two (2) additional (1) one year periods provided both the successful Bidders and the District agree and all terms and conditions remain the same. Any contract or amendment resulting from this solicitation shall be subject to fund availability and mutual written agreement between the District and the successful Bidder.
 - 1.2 **Option to Renew:** The performance period of any contract resulting from this solicitation may be renewed upon mutual agreement between the contractor and the District with no change in terms or conditions. Any extension of performance period under this provision shall be in one-year increments. The contract may be renewed for two (2) additional one-year periods, provided both parties are in agreement. Total contract length, including individual one-year extensions, shall not exceed three (3) years.
 - 1.3 **Price Increase:** Consideration of price increases at each renewal period will be given provided such escalations are justified, reasonable and acceptable to the District, and are based on claims and annual renewal trends. Any price increases must be documented and approved by the District only when a written request is received a minimum of one hundred and eighty (180) days prior to the renewal date. It is also expected that de-escalation of prices will be extended to the District if the market so reflects. The District reserves the right to not renew any contract regardless of price considerations.
 - 1.4 **Contract Extension:** The District reserves the right to automatically extend any Contract for up to ninety (90) calendar days beyond the stated Contract term, under the same terms and conditions of said Contract. Additional extensions over the first ninety (90) day extension may not exceed 6 months for the convenience of either party by mutual agreement to such extensions. The District shall notify the Successful Bidder in writing of such extensions.
 - 1.5 **Contract Amendment:** MCSB may require additional products or services of a similar nature, but not specifically identified in the contract. The Contractor agrees to provide such items, and shall provide the District prices on such additional items based upon a formula or method which is the same or similar to that used in establishing the prices in this bid. If the price(s) offered are not acceptable to the District, and the situation cannot be resolved to the satisfaction of the District, the District reserves the right to procure those items/services from other vendors or to cancel the contract. Furthermore, the District reserves the right to delete or revise items and services under this proposal at any time during the contract period when and where deemed necessary. Deletions may be made at the sole discretion of the District at any time during the contract period. Items revised must be mutually agreed upon in writing by the Contractor.
2. **ADVERTISING:** In submitting a Bid, Bidder agrees not to use the results there from as a part of any commercial advertising.
3. **ORDER OF PRECEDENCE:** In resolving conflicts resulting from errors or discrepancies in any of the ITB or Contract Documents, the order of precedence (lower number item controls) shall be as follows:
 - Amendment
 - Change Order
 - Contract/Agreement or Purchase Order
 - Addenda
 - Bid Form, if applicable
 - Technical Specifications/Attachments
 - Special Conditions
 - Supplementary Conditions
 - General Terms and Conditions
 - Instructions to Bidders
 - Invitation to Bid
4. **BID SECURITY:** When required by the Bid documents each Bid must be accompanied by a Bid security made payable to the Martin County School District in an amount of five percent (5%) of the Bidder's maximum Bid price and in the form of a certified check or cashier's check drawn upon any State or National Bank of Florida or a Bid Bond issued by a Surety that must have a "Best" rating of "A", and be authorized to do business in Florida.

Said check or Bid Bond shall be made payable to the Martin County School District and shall be given as a guarantee that Bidder, upon receipt of Notice of Tentative Award of the purchase order or contract, shall enter into the Contract or accept the purchaser order with the District, and furnish the necessary documents including, but not limited to: insurance certificates, other required Bonds, each of the said Bonds to be in the amount stated on the Invitation to Bid.

The Attorney-in-Fact who signs the bond must file with the bond a current certificate of proof of appointment as Attorney-In-Fact.

The Bid Security of the Successful Bidder shall be retained until such Bidder has been awarded a binding Contract or Purchase Order or Contract security whereupon the Bid security shall be returned. If the apparent Successful Bidder fails to execute and deliver the Purchase Order or Contract and furnish the required contract security within ten (10) calendar days after the Notice of Award, which is issued prior to the District's award of Purchase Order or Contract, the District may annul the Notice of Award, and the bid security of that Bidder shall be forfeited and retained by the District. The District may then recommend to the Board to accept the Bid of the next lowest responding Bidder, or re-advertise for bids. If the Bid of the next lowest Bidder is



accepted, this acceptance shall bind such Bidder as though it was the original Successful Bidder.

There shall be no binding contract until such time as the Board or designee executes the Contract or issues the Purchase Order as the final award of the contract. The Bid Security of other Bidders whom District believes to have a reasonable chance of receiving the award may be retained by the District until the earlier of the seventh day after the effective date of the Purchase Order or Contract or the ninety-first day after the Bid opening, whereupon Bid security furnished by such Bidders shall be returned. Bid security with Bids which are not competitive or responsive shall be returned upon award of the Bid.

- 5. **EXAMINATION OF BID DOCUMENTS & SITE:** Pursuant to Article 4, Supplementary Conditions, Bidder must satisfy itself by personal and thorough examination of the location of the proposed Work, Bid Documents, requirements of the Work and the accuracy of the estimate of the quantities of the Work to be done; and Bidder shall not at any time after the submission of a Bid dispute or complain of such estimate nor the nature or amount of Work to be done.

By submission of its Bid, Bidder affirms that it has, at its own expense, made or obtained any additional examinations, investigations, explorations, tests, and studies and obtained any additional information and data which pertain to the physical conditions (surface, subsurface, and Underground Utilities) at or contiguous to the site or otherwise, prior to bidding which may affect cost, progress, or performance of the Work and which Bidder deems necessary to determine its Bid for performing the Work in accordance with the time, price, and other terms and conditions of the Bid Documents and/or Bidder has satisfied itself with respect to such conditions and it shall make no claims against the District or the EOR if on carrying out the Work it finds that the actual conditions do not conform to those indicated.

On request, the District will provide Bidder access to the site to conduct such investigations and tests, as Bidder deems necessary for submission of its Bid. Bidder shall schedule such access in advance with the District.

Upon completion of such additional field investigations and tests, Bidder shall completely restore disturbed areas.

- 6. **ADJUSTMENTS/CHANGES/DEVIATIONS:** No adjustments, changes, or deviations shall be accepted on any item unless conditions or Specifications of a Bid expressly so provide. All adjustments, changes or deviations shall require prior written approval and shall be binding **ONLY** if issued through the District's Purchasing Office.
- 7. **BID EXEMPT:** Purchases shall not include any items or services available at lower prices on other public entity or State of Florida Contract. The District reserves the right to Bid separately any item or service if deemed to be in the best interest of the District.
- 8. **PROMOTIONAL PRICING:** In addition, Bidder shall offer to the District, during the Contract period, any item(s) offered on a "promotional" basis from the manufacturer. It shall be the successful Bidder's responsibility to monitor said item(s) and report any that are or shall be offered at lower price.
- 9. **CONTRACT SECURITY/INSURANCE:** When required by the specification herein, the successful Bidder shall furnish, a Performance Bond, Payment bond, and/or Warranty bond, and insurance certificates as stated on the cover page of this solicitation, on the District's forms, within ten (10) calendar days after notification of award. Failure to furnish the

required bonds within the time specified may be cause for rejection of the bid and any bid deposit may be retained by the District as liquidated damages and not as a penalty. Said sum shall be a fair estimate of the amount of damages the District would sustain due to Bidder's failure to furnish said bonds.

- 10. **PRICES:** Bid prices shall be fixed and firm to the extent required under Special Conditions. In the absence of a reference in the Special Conditions, bid prices shall be fixed and firm for a period of ninety (90) calendar days. Give both unit price and extend total. Prices must be stated in units of quantity specified in the bid specifications. In case of a discrepancy in computing the amount of the bid, the UNIT PRICE quoted shall govern. All prices FOB destination, freight prepaid (unless otherwise stated in special conditions). Each item must be bid separately and no attempt is to be made to tie any item or items in with any other item or items. Payment shall be made only after receipt and acceptance of materials/services. Cash discounts may be offered for prompt payment; however, such discounts shall not be considered in determining the lowest net cost for bid evaluation.

All payments shall be governed by the *Local Government Prompt Payment Act*, F.S. Chapter 218.

- 11. **DELIVERY:** All items shall be delivered F.O.B. destination to a specific District address. All delivery costs and charges must be included in the bid price. The District reserves the right to cancel orders or any part thereof, without obligation if delivery is not made at the time specified in the bid.

Unless actual date of delivery is specified, show number of days required to make delivery after receipt of purchase order in space provided. Delivery time may become a basis for making an award

NOTE TO VENDORS DELIVERING TO MARTIN COUNTY SCHOOLS WAREHOUSE: Normal receiving hours are Monday through Friday (excluding holidays) 7:00 A.M. to 2:30 P.M. Summer receiving hours, typically mid-June to early August, are 6:30 AM to 3:30 PM, Monday through Thursday. This warehouse is located at 2845 SE Dixie Highway, Building #7, Stuart, Florida 34997.

- 12. **MISTAKES:** Bidders are expected to examine the Specifications, Plans, Delivery Schedule, Bid prices, Extensions and all Instructions pertaining to supplies and services. **FAILURE TO DO SO SHALL BE AT THE BIDDER'S RISK.** In the event of extension error(s), the unit price shall prevail and the Bidder's total offer shall be corrected accordingly. Erasures or corrections on Bids must be initialed in ink by the Bidder.

Discrepancies in the multiplication of units of Work and unit prices will be resolved in favor of the unit price. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

- 13. **INVOICING AND PAYMENT:** Payment for any and all invoice(s) that may arise as a result of a Contract or Purchase Order issued pursuant to this Bid Specification shall minimally meet the following conditions to be considered as a valid payment request. **If progress payments are applied for, all invoicing and payments shall be as stipulated under the Special Conditions section titled "Progress Payments".**

Timely submission of a property certified invoice(s) in strict accordance with the price(s) and delivery elements as stipulated in the Contract document should be submitted to:



Martin County School District
 Attn: Accounts Payable Department
 1939 SE Federal Highway
 Stuart, FL., 34994
invoices@martinschools.org

All invoices shall be based upon and submitted with an approved Schedule of Values. Said Schedule of Values shall also contain a percentage breakdown of the supplies and services completed for which payment is requested in comparison to the total contract.

All invoices submitted shall consist of an original and one (1) copy;

- clearly referenced the subject Contract or Purchase Order number;
- provide a sufficient salient description to identify the goods or services for which payment is requested;
- contain date of delivery;
- original or legible copy of a signed delivery receipt including both manual signature and printed name of a designated District employee or authorized agent; be clearly marked as "partial", "complete" or "final" invoice. The District shall accept partial deliveries.

The invoice shall contain the Bidder's Federal Employer Identification number.

The District's terms of payment, unless otherwise stated in the Contract or Purchase Order documents, are "Net 30 Days" after acceptance of goods or services and receipt of an acceptable invoice as described herein. Any other items of payment must have been previously approved by the District and appear on the Contract or Purchase Order document to be binding on the District.

Should the District return an invoice for correction, the Vendor shall resubmit a corrected invoice to the District for processing.

Payment will be made after the goods/services from the awarded Proposer have been received/completed; inspected and found to comply with negotiated contract, free of damage or defect; and a properly billed invoice is received and processed in the Accounting Services Department.

14. **ESTIMATED QUANTITIES:** The estimate of the various quantities of work or goods applicable to unit price items as shown on the Bid Form is approximate and is intended solely to provide the basis of comparison upon which the Award of Contract is made. Final payment shall be made on the basis of the actual quantities received.

The District reserves the right to reduce the quantities of Work to be done and to completely eliminate any items of the work listed in the Bid Form in order that the work can be completed within the amount of available funds.

15. **SUBSTITUTE or "OR EQUAL ITEMS":** The Contract, if awarded, will be on the basis of material and equipment described in the Drawings or specified in the Specifications without consideration of possible substitute or "or-equal" items. Whenever it is indicated in the Drawings or specified in the Specifications that a substitute or "or-equal" item of material or equipment may be furnished or used by Successful Bidder if acceptable to District, application for such acceptance must be made fifteen (15) calendar days prior to the Bid opening date, or such application will not be considered by District. The procedure for submittal of any such application, including those applications made after award of the Construction Contract by Successful Bidder for consideration by EOR, is set forth in Section 6.4 of the

Supplementary Conditions which may be supplemented in the General Requirements.

16. **UNBALANCED BIDS:** Bids that are judged to be mathematically or materially unbalanced shall be cause for the bid to be rejected as non-responsive.
17. **ESTIMATED DOLLAR VALUE:** No guarantee of the dollar amount of this Bid is implied or given.
18. **INCORRECT PRICING/INVOICES:** Any pricing on invoices that are incorrect and were not included on the original Purchase Order, must be brought to the attention of the Purchasing Agent and corrected prior to the shipment(s) of goods or initiation of services. Additional costs that were not brought to the District's attention and did not receive written approval via a Change Order issued by the Purchasing Agent shall not be honored.
19. **DISTRICT PURCHASING CARD:** The School District has authorized the use of a Purchasing Card to expedite small dollar purchases for materials, supplies, and other items needed for daily operations. Awarded Bidders may be presented these credit cards by authorized School District personnel for the above mentioned purchases. Bidder (with the exception of travel). Purchase orders are strongly discouraged for purchasing materials, and supplies under \$1,000.
20. **CHANGE ORDERS:** Any addition(s) to the Statement of Work or to a Purchase Order as a result of the ITB award that adds additional costs must be brought to the School Districts attention and approved by the Purchasing Department prior to commencement of additional work, shipment of goods or the addition of unauthorized freight charges. Once approved, a Change Order shall be issued to include the additional costs and work may commence and/or shipment of goods can begin. Additional costs that were not brought to the district's attention and did not result in a Change Order approved by the Purchasing Department shall not be honored.
21. **DISPUTES:** In case of any doubt or difference of opinion as to the services to be furnished hereunder, the decision of the District shall be final and binding on both parties.
22. **BID PROTEST:** Failure to file a protest within the time prescribed in Section 120.57(3), Florida Statutes, shall constitute a waiver of proceedings under Chapter 120, Florida Statutes.
- 22.1 Any person who is adversely affected by the agency decision or intended decision shall file with the agency a notice of protest in writing within 72 hours after the posting of the notice of decision or intended decision.
- 22.2 With respect to a protest of the terms, conditions, and specifications contained in a solicitation, including any provisions governing the methods for ranking proposals, or replies, awarding contracts, reserving rights of further negotiation, or modifying or amending any contract, the notice of protest shall be filed in writing within 72 hours after the advertisement of the solicitation.
- 22.3 The formal written protest shall be filed within 10 days after the date the notice of protest is filed. Failure to file a notice of protest or failure to file a formal written protest shall constitute a waiver of proceedings under this chapter. The formal written protest shall state with particularity the facts and law upon which the protest is based. Saturdays, Sundays, and state holidays shall



be excluded in the computation of the 72-hour time periods provided by this paragraph.

22.4 In order for the District to consider the protest, the protesting party shall deliver with the formal written protest to the District a "protest bond" in the amount as follows:

22.4.1 Twenty-five thousand dollars (\$25,000) or 2 percent (2%) of the lowest accepted proposal, whichever is greater, for projects valued over \$500,000; and

22.4.2 Five percent (5%) of the lowest accepted proposal for all other projects, conditioned upon payment of all costs and fees which may be adjudged against the protestor in the administrative hearing.

22.4.3 If at the hearing the agency prevails, it shall recover all costs and attorney's fees from the protestor; if the protestor prevails, the protestor shall recover from the agency all costs and attorney's fees.

22.4.4 If the protest (with respect to 21.2 above) the protest bond shall be the same as 21.4.1 and 21.4.2, except that the protest bond amount shall be calculated against the budgeted amount of the project.

23. **DEBARMENT:** The Board shall have the authority to debar a person / corporation for cause for consideration or award of future contracts. The debarment shall be for a period commensurate with the seriousness of the causes, generally not to exceed three (3) years. When the offense is willful or blatant, a longer term of debarment may be imposed, up to an indefinite period.

24. **FEDERAL DEBARMENT CERTIFICATION:** Certification regarding debarment, suspension, ineligibility and voluntary exclusion as required by Executive Order 12549, Debarment and Suspension, and implemented at 34 CFR, Part 85, as defined at 34 CFR Part 85, Sections 85.105 and 85.110-(ED80-0013).

a. The prospective lower tier participant certifies, by submission and signature of this submittal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this solicitation.

25. **DELETION/OVERSIGHT/MISSTATEMENT:** Any deletion, oversight or misstatement of the Specifications shall not release the Bidder from the responsibility of completing the project within the agreed upon time frame.

26. **SCRUTINIZED COMPANIES:** Pursuant to Sections 287.135, 215.4725, and 215.473, of the Florida Statutes which prohibits agencies from contracting with any company, principals, or owners on the Scrutinized Companies with Activities in Sudan List, participation in the Boycott of Israel, the Scrutinized Companies with Activities in the Iran Petroleum Energy List, and is not engaged in business operations in Cuba or Syria are prohibited from contracting for goods or services in any amount at the time of submitting to this solicitation through the term of this contract, including renewals or extensions.

Acceptance of an offer certifies Contractor attests that firm is not on any list, engaged in any business operations, or

participates in activities as specified in this section. If firm is found negligent, contract shall be terminated; and submission of a false certification may subject firm to civil penalties, attorney's fees, and/or costs

27. **DEMONSTRATIONS/SAMPLES/MOCKUPS:** The District may request a full demonstration of any product or service before the award of a contract. All demonstrations will be done at the expense of the Bidder.

When requested, samples are to be furnished free of charge to the District. If a sample is requested it must be delivered within seven (7) days of the request unless otherwise stated in the bid documents. Each sample must be marked with the following:

- The Bidder's name, the bid item and the manufacturer's number.
- Samples shall not be returned unless the Bidder requests it when samples are delivered.
- Samples must be a complete pack, box, bag, etc. of the required items(s), packaged as specified in the bid document.
- Failure to provide samples packaged as required by the bid specifications shall result in the item(s) and/ or the bid being rejected as nonconforming.
- Items may be tested for compliance with specifications under the direction of the Florida Department of Agriculture and Consumer Services, or an independent testing laboratory. Bidders shall assume full responsibility for payment for any and all charges for testing and analysis of any materials offered or delivered that **do not conform** to the minimum required specifications. Bidder's disposition of all items delivered in this category must be at no expense to the District.

The DISTRICT may request a full demonstration of any product or service before the award of a contract. All demonstrations shall be done at the expense of the BIDDER.

Mockups must be approved prior to work beginning. The mockup shall be the basis for the quality of work and the work's acceptance.

28. **COPYRIGHTS OR PATENT RIGHTS:** The Bidder warrants that there has been no violation of copyrights or patent rights in the manufacturing, producing or selling the goods shipped or ordered as a result of this ITB. The seller agrees to hold the District harmless from all liability, loss or expense occasioned by any such violation.

29. **DEFAULT:** In case of default by the Bidder, the Board may procure the articles or services from other sources and hold the Bidder responsible for any excess costs incurred released.

30. **EMPLOYEES:** Employees of the awarded Bidder shall at all times be under its sole direction and not an employee or agent of the District. The Awarded Bidder shall supply competent and physically capable employees. The District may require the Awarded Bidder to remove an employee it deems careless, incompetent, insubordinate or otherwise objectionable. Awarded Bidder shall be responsible to the District for the acts and omissions of all employees working under its directions.



31. **NON-DISCRIMINATION & EQUAL OPPORTUNITY EMPLOYMENT:** The Bidder certifies that they are in compliance with the non-discrimination clause contained in Section 202, Executive Order 11246, as amended by Executive Order 11375 relative to equal employment opportunity for all persons without regard to race, color, religion, sex or national origin. The provisions of the ADA Act of 1990 pertaining to employment shall also be applicable.
- 31.1 During the performance of the Contract, the awarded Bidder shall not discriminate against any employee or applicant for employment because of race, gender, gender identity or expression, religion, national origin, ethnicity, sexual orientation, marital status, political affiliation, familial status, age or disability in the solicitation, selection, hiring, or treatment of sub-contractors, vendors, suppliers, or commercial customers
- 31.2 The awarded Bidder will take affirmative action to ensure that employees are treated during employment, without regard to their race, religion, color, gender or national original, or disability. Such actions must include, but not be limited to, employment, promotion; demotion or transfer; recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.
- 31.3 The awarded Bidder shall agree to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.
- 31.4 The awarded Bidder further agrees that he/she will ensure that Subcontractors, if any, will be made aware of and will comply with this nondiscrimination clause. Bidder shall provide equal opportunity for sub-contractors to participate in all of its public sector and private sector sub-contracting opportunities.
- 31.5 Bidder understands and agrees that violation of this clause is a material breach of the contract and may result in contract termination, debarment, or other sanctions.
32. **TAXES:** The District is exempt from all Federal, State, and Local taxes. An exemption certificate will be provided.
33. **SALES TAX:** All materials and supplies necessary for completion of this contract are subject to Florida Sales and Use Tax in accordance with Florida Statutes and shall be included in the Contract Price stated by the Contractor.
34. **EXCLUSIVE RIGHTS-USE OF OTHER CONTRACTS:** The right to provide the commodities and services granted under this contract shall not be exclusive. The District reserves the right to utilize any other District contract, any State of Florida Contract, any contract awarded by any other city or county governmental agencies, any other school board, any other community college/state university system cooperative ITB agreement, or to directly negotiate/purchase per School Board policy and/or State Board Rule 6A-1.012(6) in lieu of any offer received or award made as a result of this ITB, if it is in the best interest to do so. The District also reserves the right to separately ITB any single order or to purchase any item on this ITB if it is in its best interest to do so.
35. **COOPERATIVE PURCHASING AGREEMENTS:** All Bidders submitting a response to this ITB agree that such response also constitutes a bid to all State Agencies and Political Subdivisions of the State of Florida under the same conditions, for the same prices and for the same effective period as this bid, *should the awarded Bidder(s) deem it in the best interest of their business to do so.* This agreement in no way restricts or interferes with any state agency or political subdivision of the State of Florida to re bid any or all items.
36. **RIGHTS TO BID DOCUMENTS:** All copies and contents of any bid, attachment, and explanation thereof submitted in response to this ITB (except copyright material), shall become the property of the School District of Martin County, Florida. The School District reserves the right to use, at its discretion, and in any manner it deems appropriate, any concept, idea, technique or suggestion contained therein. All copyright and industrial/commercial proprietary, confidential and/or privileged information such as financial records, must be clearly identified, as such confidentiality is protected until award of contract, in accordance with Chapter 119, F.S. Said material shall be returned to the Bidders prior to award of contract so as to preserve the proprietary and confidential nature of its contents.
37. **SEVERABILITY:** Indulgence by the District on any non-compliance by the Bidder does not constitute a waiver of any rights under this ITB. If any term or provision of this ITB or resulting Contract, or the application thereof to any person or circumstances shall, to any extent, be held invalid or unenforceable, the remainder of this ITB or Contract, or the application of such terms or provisions to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected, and every other term provision of this Bid/Contract shall be deemed valid and enforceable to the extent permitted by law.
38. **VENUE:** All contracts shall be governed by the laws of the State of Florida and venue shall be in Martin County, Florida. The venue of any legal action resulting from this Proposal shall be Martin County, Florida.
39. **EXPENSES:** Neither the DISTRICT nor its representatives shall be liable for any expenses incurred in connection with preparation of a response to this ITB. All expenses in the preparation of this ITB are the sole responsibility of the Bidder. All Submittals should be prepared to provide a straightforward and concise description of the respondents' qualifications and ability to meet the requirements of the ITB.
40. **SOVEREIGN IMMUNITY:** No Waiver of Sovereign Immunity: Nothing contained herein is intended to serve as a waiver of sovereign immunity by any agency or political subdivision to which sovereign immunity may be applicable or as a waiver of limits to liability or rights existing under Section 768.28, Florida Statutes.
41. **VERIFICATION OF EMPLOYMENT (E-VERIFY):** The District shall not intentionally award contracts to any contractor who knowingly employs unauthorized alien workers, constituting a violation of the employment provisions of the Immigration and Nationality Act ("INA"). The District shall consider the employment by the Contractor of unauthorized aliens a violation of 8 U.S.C. Section 1324a(e) [Section 274A(e) of the INA]. The Contractor agrees that such violation by the Contractor shall be grounds for the unilateral cancellation of this Contract by the District.
- a. Pursuant to Section 448.095, Florida Statutes, Contractor shall register with and use the U.S. Department of Homeland Security's E-Verify system to verify the work authorization status of all employees hired during the term of this Agreement and must, upon request, provide evidence of compliance with this provision.
- b. Subcontractors
- (i) Contractor shall also require all subcontractors performing work under this Agreement to use the E-Verify system for any employees they may hire during the term of this Agreement.



- (ii) Subcontractors shall provide Contractor with an affidavit stating the subcontractor does not employ, contract with, or subcontract with an unauthorized alien, as stated in Section 448.095, Florida Statutes.
 - (iii) Contractor shall provide a copy of such affidavit to the School Board upon receipt and shall maintain a copy for the duration of the Agreement.
- c. Failure to comply with this provision is a material breach of the Agreement, and School Board may choose to terminate the Agreement at its sole discretion. Contractor may be liable for all costs associated with School Board securing the same services, inclusive, but not limited to, higher costs for the same services and rebidding costs (if necessary).

42. DAVIS-BACON & LABOR STANDARDS

If applicable refer Section V-Special Conditions, Contractor agrees to comply with the requirements of the Secretary of Labor in accordance with the Davis-Bacon Act as amended, the provisions of Contract Work Hours and Safety Standards Act (40 U.S.C. 327 et seq.) and all other applicable Federal, state and local laws and regulations pertaining to labor standards insofar as those acts apply to the performance of this project. The Contractor agrees to comply with the Copeland Anti-Kick Back Act (18 U.S.C. 874 et seq.) and its implementing regulations of the U.S. Department of Labor at 29 CFR Part 5. Contractor shall provide documentation that demonstrates compliance with hour and wage requirements of this part. Such documentation shall be made available to the District for review upon request.

43. **FLORIDA PREFERENCE**: Pursuant to Florida Statute 287.084, award recommendations shall make appropriate adjustments to pricing when considering bids from bidders having a principal place of business outside the State of Florida. If applicable, all bidders must complete and submit the Bidder's Statement of Principal Place of Business form with the response to this solicitation. Failure to comply shall render a bid non-responsive to the terms of this solicitation. This preference does not apply to purchases using Federal Funds.
44. **THE U.S. DEPARTMENT OF AGRICULTURE'S "BUY AMERICAN" PROVISION**: Section 104(d) of the William F. Goodling Child Nutrition Reauthorization Act of 1998

requires schools and institutions participating in the National School Lunch Program (NSLP) and School Breakfast Program (SBP) in the contiguous United States to purchase, to the maximum extent practicable, domestic commodities or products for use in meals served under the programs. The legislation defines "domestic commodity or product" as one that is produced in the United States and is processed in the United States, **substantially** using agriculture commodities that are produced in the United States.

The word "substantially" is defined as over 51 percent of the final processed product consists of agricultural commodities that were grown domestically.

45. **PERSONAL INJURY AND PROPERTY DAMAGE**: The Contractor assumes any and all risk of personal injury and property damage attributable to the willful or negligent acts or omissions of the Contractor and the officers, employees, and agents thereof. The Contractor also assumes such risk with respect to the willful or negligent acts or omissions of persons subcontracting with the Contractor or otherwise acting or engaged to act at the instance of the Contractor in furtherance of this Contractor fulfilling the Contractor's obligations under this contract.
46. **TRADE-NAMED ITEMS**: When an item appearing in the solicitation document is listed by a registered trade name and the wording "no substitute", "spec only" or "only" is indicated, only that trade-named item will be considered. The district reserves the right to reject products that are listed as approved and waive formalities. Should a vendor wish to have products evaluated for future solicitation consideration, please contact in writing, the Director of Purchasing. If the wording "no substitute", "spec only" or "only" does not appear with the trade name, offerors may submit prices on their trade-named item, providing they attach a descriptive label of their product to this solicitation. Sample merchandise offered hereunder as "offered equal" may be required to be submitted to the purchaser in advance of the solicitation award. Substitutions for items solicited, awarded and ordered are prohibited except as may be approved by the Director of Purchasing.
47. **TRENCH SAFETY ACT**: The Contractor shall comply with F.S. 553.60-553.64.



SECTION IV

SUPPLEMENTARY CONDITIONS

BY ARTICLES FOR

THE CONSTRUCTION CONTRACT

(ARTICLE 1- Definitions are identified and incorporated in Section I, Definitions, Abbreviations, and Acronyms)

ARTICLE 2 – PRELIMINARY MATTERS

2.1 DELIVERY OF BONDS AND INSURANCE CERTIFICATES:

2.1.1 After Board approval for award, the CONTRACTOR shall deliver to the DISTRICT such Bonds and Insurance Policies, Certificates or other documents as the CONTRACTOR may be required to furnish in accordance with the Contract Documents. The aforementioned documents must be submitted to the DISTRICT prior to any WORK being performed.

2.2 COPIES OF DOCUMENTS:

2.2.1 The DISTRICT shall furnish to CONTRACTOR ONE (1) copy (unless additional copies exist) of the Contract Documents for the execution of the WORK. CONTRACTOR shall be responsible for procuring additional copies.

2.3 NOTICE TO PROCEED:

2.3.1 The Contract Times shall commence to run on the date stated in the Notice to Proceed.

2.4 STARTING THE WORK:

2.4.1 CONTRACTOR shall begin to perform the WORK on the commencement date stated in the Notice to Proceed, but no WORK shall be done at the Site prior to said commencement date.

1.4.2 CONTRACTOR'S Review of Contract Documents: Before undertaking each part of the WORK, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. CONTRACTOR shall promptly report in writing to EOR any conflict, error, ambiguity or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from EOR before proceeding with any WORK affected thereby; however, CONTRACTOR shall not be liable to DISTRICT or EOR for failure to report any conflict, error, ambiguity or discrepancy in the Contract Documents, unless CONTRACTOR knew or reasonably should have known thereof.

2.4.3 INTERIOR INSPECTION FORM: Prior to beginning work, inspect with Owner's Representative or Architect, building interior(s). Log conditions of ceiling tiles, lights, walls and flooring materials using the Interior Inspection Form attached at the end of this Section. Confirmation of existing conditions shall be made and recorded onto a video disk.

Submit two copies of the form signed by the Contractor, Owner's Representative or Architect and one copy of video disk.

2.4.4 EXTERIOR INSPECTION FORM: Prior to beginning work, inspect with Owner's Representative or Architect, existing building exterior(s) and site conditions. Log, as required, conditions of exterior walls, building attachments, sidewalks, miscellaneous paving and landscaping using the Exterior Inspection Form attached at the end of this Section. Confirmation of existing conditions shall be recorded onto a video .

Submit two copies of form signed by the Contractor, Owner's Representative or Architect and one copy of video disk.

2.5. PRECONSTRUCTION CONFERENCE:

2.5.1 The CONTRACTOR is required to attend a preconstruction conference within twenty (20) days after award. This conference shall be attended by the DISTRICT, CONSULTANT, and others as appropriate in order to discuss the WORK.

2.5.2 The CONTRACTOR'S initial schedule for shop drawings submittals, obtaining permits and Plan of Operation and CPM Schedule shall be reviewed and finalized. As a minimum, the CONTRACTOR'S representatives should include its project manager and schedule expert. If the submittals are not finalized at the end of the meeting, additional meetings shall be held so that the submittals can be finalized prior to the submittal of the first Application for Payment. No Application for Payment shall be processed prior to receiving acceptable initial submittals from the CONTRACTOR.

2.5.3 DISTRICT shall schedule preconstruction conference.

2.5.3.1 Attendance Required: DISTRICT's Project Manager, EOR, and Contractor/CM Project Manager and Superintendent.

2.5.3.2 Agenda:

Distribution of Contract Documents.

Confirmation of prior submission (during bid process) of list of Subcontractors, list of Products, Schedule of Values, and Progress Schedule.

2.5.3.3 Designation of personnel representing the parties in Contract, and the EOR.

2.5.3.4 Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders and Contract closeout procedures.

Scheduling.

2.5.3.5 Scheduling activities of a Geotechnical Engineer.

2.5.3.6 Issuance of Notice to Proceed.

2.5.3.7 Record minutes and distribute copies within two days after meeting to participants, with copies to EOR, DISTRICT, participants, and those affected by decisions made.

2.6 SITE MOBILIZATION MEETING

2.6.1 DISTRICT will schedule a meeting at the Project site prior to Contractor occupancy.

2.6.2 Attendance Required: DISTRICT, EOR, Special Consultants, and Contractor, Contractor's Superintendent, and major Subcontractors.

2.6.3 Agenda:

2.6.3.1 Use of premises by DISTRICT and Contractor.

2.6.3.2 DISTRICT's requirements and partial occupancy.



2.6.3.3 Construction facilities and controls provided by DISTRICT.

2.6.3.4 Temporary utilities provided by DISTRICT.

2.6.3.5 Survey and building layout.

2.6.3.6 Security and housekeeping procedures.

2.3.3.7 Schedules.

2.6.3.8 Application for payment procedures.

2.6.3.9 Procedures for testing.

2.6.3.10 Procedures for maintaining record documents.

2.6.3.11 Requirements for start-up of equipment.

2.6.3.12 Inspection and acceptance of equipment put into service during construction period.

2.6.3.13 Record minutes and distribute copies within two days after meeting to participants, with copies to CONSULTANT, DISTRICT, participants, and those affected by decisions made.

2.7 PROGRESS MEETINGS

2.7.1 Schedule and administer meetings throughout progress of the work at maximum monthly intervals.

Make arrangements for meetings, prepare agenda with copies for participants, and preside at meetings.

2.7.2 Attendance Required: Job superintendent, major Subcontractors and suppliers, DISTRICT, EOR, as appropriate to agenda topics for each meeting.

2.7.3 Agenda:

2.7.3.1 Review minutes of previous meetings.

2.7.3.2 Review of Work progress.

2.7.3.3 Field observations, problems, and decisions.

2.7.3.4 Identification of problems that impede planned progress.

2.7.3.5 Review of submittals schedule and status of submittals.

2.7.3.6 Review of off-site fabrication and delivery schedules.

2.7.3.7 Maintenance of progress schedule.

2.7.3.8 Corrective measures to regain projected schedules.

2.7.3.9 Planned progress during succeeding work period.

2.7.3.10 Coordination of projected progress.

2.7.3.11 Maintenance of quality and work standards.

2.7.3.12 Effect of proposed changes on progress schedule and coordination.

2.7.3.13 Other business relating to work.

2.7.3.14 Record minutes and distribute copies within two days after meeting to participants, with copies to EOR, DISTRICT, participants, and those affected by decisions made.

2.8 PREINSTALLATION MEETING

2.8.1 When required in individual specification section, convene a pre-installation meeting at the site prior to commencing work of the section.

2.8.2 Require attendance of parties directly affecting, or affected by, work of the specific section.

2.8.3 Notify DISTRICT and EOR five (5) working days in advance of meeting date.

2.8.4 Prepare agenda and preside at meeting:

2.8.5 Review conditions of installation, preparation and installation procedures.

2.8.6 Review coordination with related work.

2.8.7 Record minutes and distribute copies within two days after meeting to participants, with copies to EOR, DISTRICT, participants, and those affected by decisions made.

2.9 FINALIZING SCHEDULES:

2.9.1 Within ten (10) days of receiving the Notice to Proceed the CONTRACTOR shall submit the final schedule approved by the DISTRICT and EOR. The finalized progress schedule shall be acceptable to the DISTRICT as providing an orderly progression of the WORK to completion within the Contract Time, but such acceptance shall neither impose on the DISTRICT responsibility for the progress or scheduling of the WORK nor relieve CONTRACTOR from full responsibility thereof. The finalized schedule of Shop Drawing submissions shall be acceptable to the DISTRICT as providing a workable arrangement for processing the submissions. The finalized Schedule of Values shall be acceptable to the DISTRICT as to form and substance.

2.10 SUBMITTAL PROCEDURES

2.10.1 SCOPE OF WORK

Administrative and procedural requirements for processing of submittals during construction process. Submittals may include the following:

- Proposed Products Lists.
- Proposed Vendor List.
- Product Data.
- Shop Drawings.
- Samples.
- Design Data.
- Field Test Reporting.
- Quality Control Reporting.
- Certificates.
- Manufacturer's Installation, Handling and Storage Instructions.
- Manufacturer's Field Reports.
- Erection Drawings.
- Closeout Documents
- Warranties.
- Scheduling of Work
- Construction Progress Schedule.
- Submittals Schedule.
- Survey and Layout Data.
- Construction Progress Reporting.
- Periodic Work Observation.
- Photographic Documentation.
- Purchase Order Tracking.
- Operation and Maintenance Documentation

2.10.2 RELATED SECTIONS

- A. Payment Procedures.
- B. Project Coordination.
- C. References.
- D. Quality Control.
- E. Product Storage and Handling Requirements.
- F. Closeout Submittals.



2.10.2.1 SEE 2.10.2 RELATED SECTIONS AND SUBMITTAL SECTIONS 2.10.1 FOR INDIVIDUAL SUBMITTAL PROCEDURES.

2.10.3 SUBMITTAL PROCEDURES-GENERAL

2.10.3.1 Submittal Procedures shall be in conformance with General Conditions of the Contract and as amended by District.

2.10.3.2 Transmit each submittal with District's Standard Transmittal form.

2.10.3.3 Sequentially number each transmittal forms. Revise submittals with original number and a sequential alphabetic suffix.

2.10.3.4 Identify project, Contractor, subcontractor or supplier pertinent drawing and detail number, and specification section number, as appropriate.

2.10.3.5 Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction work, and coordination of information are in accord with requirements of the work and contract documents.

2.10.3.6 Schedule submittals to expedite the project, and deliver to Consultant and District at business address. Coordinate submission of related items.

2.10.3.7 For each submittal for review, allow 10 days excluding delivery time to and from the Contractor.

2.10.3.8 Identify variations from contract documents and product or system limitations, which may be detrimental to successful performance of the completed work.

2.10.3.9 Provide space for Contractor and EOR review stamps.

2.10.3.10 When revised for resubmission, identify all changes made since previous submission.

2.10.3.11 Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.

2.10.3.12 Submittals not requested will not be recognized or processed.

2.10.4 PRODUCT DATA

2.10.4.1 Product Data for Review:

2.10.4.1.1 Submit to EOR for review for purpose of checking for conformance with information given and design concept expressed in Contract Documents.

2.10.4.1.2 After review, provide copies and distribute per Submittal Procedures article above and for record documents purposes described in Section 01 78 00 – Closeout Submittals.

2.10.4.2 Product Data for Information:

2.10.4.2.1 Submittal for EOR'S knowledge as contract administrator or for District.

2.10.4.3 Product Data for Project Close-out:

2.10.4.3.1 Submit for District's benefit during and after project completion.

2.10.4.4 Submit number of copies, which Contractor/CM requires, plus two copies for Consultant.

2.10.4.5 Mark each copy to identify applicable products, models, options, and other data.

2.10.4.6 Supplement manufacturers' standard data to provide information unique to project.

2.10.4.7 Indicate product utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

2.10.4.8 After review, distribute in accord with Submittal Procedures article above and provide copies for record documents described in Section 6.37 Closeout Submittals.

2.10.5 CONSTRUCTION SUBMITTALS

2.10.5.1 Submit one copy of Building Permit, Site Permits, Environmental Permits, or other permits required for construction of work.

2.10.5.2 Submit Payment Applications to Consultant for review for purpose of checking conformance with information given and design concept expressed in Contract Documents.

2.10.5.3 Certificates:

2.10.5.3.1 When specified, submit certification by manufacturer, installation/application subcontractor, or contractor to Consultant, in quantities specified for Product Data.

2.10.5.3.2 Indicate material or Product conforms to or exceeds specified requirements.

2.10.5.3.3 Submit supporting reference date, affidavits, and certifications as appropriate.

2.10.5.3.4 Certificates may be recent or previous test results on material or Product, but must be acceptable to Consultant.

2.10.5.4 Manufacturer's Instructions:

2.10.5.4.1 When specified, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, to Consultant for delivery to District in quantities specified for Product Data.

2.10.5.4.2 Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

2.10.5.4.3 Refer to Quality Control and Warranty sections for quality assurance requirements.

2.10.5.5 Manufacturer's Field Reports:

2.10.5.5.1 Submit reports to EOR and District's Project Manager.

2.10.5.5.2 Submit report within 5 days of observation to EOR.

2.10.5.5.3 Submit for information for purpose of assessing conformance with information given and design concept expressed in Documents.

2.10.5.6 Erection Drawings:

2.10.5.6.1 Submit drawings to Consultant and District's Project Manager.

2.10.5.6.2 Submit for information for purpose of assessing conformance with information given and design concept expressed in Documents.

2.10.5.6.3 Data indicating inappropriate or unacceptable work is subject to rejection by EOR or District.



ARTICLE 3 – USE OF CONTRACT DOCUMENTS

3.1 INTENT:

3.1.1 The Contract Documents comprise the entire agreement between the DISTRICT and CONTRACTOR concerning the WORK. The Contract Documents are complementary: what is called for by one is as binding as if called for by all. The Contract Documents shall be construed in accordance with the laws of the State of Florida with venue in Martin County, Florida.

3.1.2 It is the intent of the Contract Documents to describe the WORK, functionally complete, to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result shall be provided whether or not specifically called for.

3.2 REFERENCE TO STANDARDS:

3.2.1 Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the Laws or Regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code or Laws or Regulations in effect at the time of opening of Bids, 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 be effective to change the duties or responsibilities of the DISTRICT, CONTRACTOR or EOR or any of their agents or employees from those set forth in the Contract Documents, nor shall it be effective to assign to DISTRICT, EOR OR EOR'S agents or employees, any duty or authority to supervise or direct the furnishing or performance of the WORK or any duty or authority to undertake responsibility contrary to the provisions of the Contract Documents.

3.3. REVIEW OF CONTRACT DOCUMENTS

3.3.1 The Contract Documents which comprise the Contract between the DISTRICT and the Contractor are attached hereto and made part hereof and consist of the following:

- 3.3.1.1 The Purchase Order.
- 3.3.1.2 Contractor's Bid and Bid Bonds
- 3.3.1.3 Bid Documents, consisting of:
 - 3.3.1.4 Invitation to Bid and Instructions to Bidders.
 - 3.3.1.5 General Terms & Conditions.
 - 3.3.1.6 Supplementary Conditions
 - 3.3.1.7 Special Conditions.
 - 3.3.1.8 Technical Provisions.
 - 3.3.1.9 All Plans.
 - 3.3.1.10 All Addenda.
 - 3.3.1.11 Recorded Public Construction Performance and Payment Bond in a form supplied by the DISTRICT, which shall be provided to the DISTRICT by the Contractor, along with the return of an executed Purchase Order. The Contractor shall be responsible for recording the Public Construction Bond.

3.3.1.12 Insurance Certificates which shall be provided by the Contractor, along with the return of an executed copy of this Contract.

3.3.1.13 Any Modifications, including change orders, duly delivered after execution of this Contract.

3.3.1.14 Executed Notice of Intent to Award.

3.3.1.15 Executed Notice to Proceed

3.3.2 Except for duly authorized and executed Modifications including but not limited to change orders and contract amendments, any conflict between the terms and conditions of this Contract and the terms and conditions of any of the other contract documents shall be interpreted in favor of this Contract

3.3.3 If, during the performance of the WORK, CONTRACTOR finds a conflict, error or discrepancy in the Contract Documents, CONTRACTOR shall so notify the CONSULTANT, in writing, at once and before proceeding with the WORK affected thereby shall obtain a written interpretation or clarification, except in an emergency as authorized by paragraph 6.13.

3.4 ORDER OF PRECEDENCE OF CONTRACT DOCUMENTS

3.4.1 In resolving conflicts resulting from errors or discrepancies in any of the Contract Documents, the order of precedence shall be as follows:

1. Amendment
2. Change Order
3. Construction Contract or Purchase Order
4. Addenda, with later date having greater priority
5. Bid Form
6. Special Conditions
7. Supplementary Conditions
8. Invitation to Bid
9. Instructions to Bidders
10. General Terms & Conditions
11. Technical Specifications
12. Contract Drawings

The captions or subtitles of the several articles and divisions of these Contract Documents constitute no part of the context and hereof, but are only labels to assist in locating and reading the provisions hereof.

3.4.2 With reference to the Drawings, the order of precedence is as follows:

1. Figures govern over scaled dimensions
2. Detail drawings govern over general drawings
3. Addenda/Change Order drawings govern over any other drawings
4. Drawings govern over standard drawings

3.4.3. Except as otherwise specifically stated in the Contract Documents or as may be provided by amendment or supplement thereto issued by one of the methods indicated in paragraph 3.5, (Amending of Contract Documents) the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity or discrepancy between the provisions of the Contract Documents and:

1. The provisions of any such standard, specification, manual, code or instruction (whether or note specifically incorporated by reference in the Contract Documents); or
2. The provisions of any such Laws or Regulations applicable to the performance of the WORK (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

No provision of any such standard, specification, manual, code or instruction shall be effective to change the duties and responsibilities of DISTRICT, CONTRACTOR or CONSULTANT, or any of their subcontractors, agents or employees from those



set forth in the Contract Documents, no shall it be effective to assign to DISTRICT, EOR'S or any of EOR's agents or employees any duty or authority to supervise or direct the furnishing or performance of the WORK or any duty or authority to undertake responsibility inconsistent with the provisions of paragraph 9.10, (Limitations on EOR) or any other provision of the Contract Documents.

3.5 AMENDING CONTRACT DOCUMENTS:

3.5.1 The Contract Documents may be amended to provide for additions, deletions and revisions in the WORK or to modify the terms and conditions thereof by a Change Order (pursuant to Article 10, Changes in the Work).

3.5.2 Additionally, the requirements of the Contract Documents may be supplemented and minor variations and deviations in the WORK may be authorized, in one or more of the following ways:

3.5.2.1 A Field Order (pursuant to paragraph 9.5, Changes in the Work)

3.5.2.2 EOR'S approval of a Shop Drawing or sample (pursuant to paragraphs 6.11, Shop Drawings and Samples), or

3.5.2.3 EOR'S written interpretation or clarification (pursuant to paragraph 9.4 Clarifications and Interpretations).

3.6 REUSE OF DOCUMENTS:

3.6.1 Neither CONTRACTOR nor any Subcontractor or Supplier or other person or organization performing or furnishing any of the WORK under a direct or indirect contract with the DISTRICT shall have or acquire any title to or ownership rights in any of the Contract Documents, drawings, technical specifications or other documents used on the WORK; and, they shall not reuse any of them on extensions of the Project or any other project without prior written consent of the DISTRICT and EOR.

ARTICLE 4 – SITE OF THE WORK

4.1 AVAILABILITY OF LANDS:

4.1.1 The DISTRICT shall furnish, as indicated in the Contract Documents, the lands upon which the WORK is to be performed, rights-of-way and easements for access thereto and such other lands which are designated for the use of CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities shall be obtained and paid for by the DISTRICT, unless otherwise provided in the Contract Documents. Nothing contained in the Contract Documents shall be interpreted as giving the CONTRACTOR exclusive occupancy of the lands or rights-of-way provided. CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.1.2 Occupying Private Land: The Contractor shall not enter upon nor use any property not under the control of the DISTRICT until a written temporary construction easement agreement has been executed by the CONTRACTOR and the property owner, and a copy of said easement furnished to the DISTRICT and EOR prior to said use; and, neither the DISTRICT nor the EOR shall be liable for any claims or damages resulting from the CONTRACTOR'S trespass on or use of any such properties. The CONTRACTOR shall provide the DISTRICT with a signed release from the property owner confirming that the lands have been satisfactorily restored upon completion of the WORK.

4.1.3 WORK in State, County and DISTRICT Rights-of-Way and Easements: When the WORK involves the installation of sanitary sewers, storm sewers, drains, water mains, manholes, underground structures, or other disturbances of existing features in or across streets, rights-of-way, easements, or

other property, the CONTRACTOR shall (as the WORK progresses) promptly back-fill, compact, grade and otherwise restore the disturbed area to a basic condition which shall permit resumption of pedestrian or vehicular traffic and any other critical activity or function consistent with the original use of the land. Unsightly mounds of earth, large stones, boulders, and debris shall be removed so that the site presents a neat appearance as part of the contract.

4.1.4 WORK Adjacent to Telephone, Power, Cable TV and Gas Company Structures: In all cases where WORK is to be performed near telephone, power, water, sewer, drainage, cable TV, or gas company facilities, the Contractor shall provide written notification to the respective companies of the areas of which WORK is to be performed, prior to the actual performance of any WORK in these areas.

4.1.5 Use of Public Streets: The use of public streets and alleys shall be such as to provide a minimum of inconvenience to the public and to other vehicular and non-vehicular traffic. The CONTRACTOR shall remove any earth or excavated materials spilled from trucks and clean the streets to the satisfaction of the DISTRICT, the EOR, the Florida Department of Transportation, or other agency or governmental entity having jurisdiction, as applicable.

4.2 REPORTS OF PHYSICAL CONDITIONS:

4.2.1 Subsurface Explorations: Where applicable, reference is made in the technical specifications for identification of those reports of explorations and tests of subsurface conditions at the site that have been utilized by EOR in preparation of the Contract Documents.

4.2.2 Existing Structures: Where applicable, reference is made to the technical specifications, for identification of those drawings of physical conditions in or relating to existing surface and subsurface structures (except Underground Facilities referred to in paragraph 4.3 herein) which are at or contiguous to the site that have been utilized by EOR in preparation of the Contract Documents.

4.2.3 Neither the DISTRICT nor EOR makes any representation as to the completeness of the reports or drawings referred to in Paragraph 4.2.1. Subsurface Explorations or 4.2.2. Existing Structures above or the accuracy of any data or information contained therein. CONTRACTOR may rely upon the general accuracy of the technical data contained in such reports and drawings but not for the completeness thereof for CONTRACTOR'S purposes including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto. However, the CONTRACTOR may not rely upon any interpretation of such technical data, including any interpolation or extrapolation thereof, or any non-technical data, interpretations, and opinions contained therein.

4.2.4 Where the dimensions and locations of existing structures are of critical importance in the installation or connection of new WORK, the CONTRACTOR shall verify such dimensions and locations in the field before the fabrication of any materials or equipment which is dependent on the correctness of such information. There shall be no additional cost to the DISTRICT for CONTRACTOR'S failure to verify such dimensions and locations, or for inaccurate verifications by CONTRACTOR.

4.3 PHYSICAL CONDITIONS -- UNDERGROUND FACILITIES:

4.3.1 Indicated: The information and data indicated in the Contract Documents with respect to existing Underground Utilities at or contiguous to the site is based on information and data furnished to the DISTRICT or EOR by the owners of such Underground Utilities or by others.



4.3.1.1 The DISTRICT and EOR shall not be responsible for the accuracy or completeness of any such information or data; and,

4.3.1.2 The CONTRACTOR shall notify the Underground Service Alert (USA) System, Phone No. 1-800-227-2600, and Sunshine State One Call Services (1-800-432-4770) at least 48 hours in advance of the commencement of WORK at any site to allow the member utilities to examine the construction site and mark the location of the utilities' respective facilities.

4.3.1.3 The CONTRACTOR acknowledges that some (or all) of the utility companies with facilities shown on the drawings may not be members of the USA System or Sunshine State One Call Services; and, therefore, not automatically contacted by the above referenced telephone number. The CONTRACTOR shall be responsible for making itself aware of utility company facilities not reported by the USA System or Sunshine State One Call Services, and shall be liable for any and all damages stemming from repair or delay costs or any other expenses resulting from the unanticipated discovery of underground utilities. The CONTRACTOR shall be responsible for notifying all of the utilities at least 48 hours in advance of the commencement of WORK at any site to allow the utilities to examine the construction site and mark the location of the utilities' respective facilities. The CONTRACTOR shall also be responsible for verifying that each utility has responsibly responded to such notification.

4.3.1.4 CONTRACTOR shall have full responsibility for reviewing and checking all such information and data. Further, the CONTRACTOR shall be responsible for locating all Underground Facilities whether or not shown or indicated in the Contract Documents, for coordination of the WORK with the owners of such Underground Facilities during construction, for the safety and protection thereof as provided in paragraph 6.10, and repairing any damage thereto resulting from the WORK, the cost of all of which shall be considered as having been included in the Contract Price.

4.3.1.5 All water pipes, sanitary sewers, storm drains, force mains, gas mains, or other pipe, telephone or power cables or conduits, pipe or conduit casings, curbs, sidewalks, service lines and all other obstructions, whether or not shown, shall be temporarily removed from or supported across utility line excavations. Where it is necessary to temporarily interrupt services, the CONTRACTOR shall notify the DISTRICT or occupant of such facilities both 48 hours before the interruption and again immediately before service is resumed. Before disconnecting any pipes or cables, the CONTRACTOR shall obtain permission from the DISTRICT or occupant, or shall make suitable arrangements for their disconnection by the DISTRICT or occupant. The CONTRACTOR shall be responsible for any damage to any such pipes, conduits or cables, and shall restore them to service promptly, as part of the work, as soon as the WORK has progressed past the point involved. Approximate locations of known water, sanitary, drainage, natural gas, power, telephone and cable TV installations along the route of new pipelines or in the vicinity of new WORK are shown, but are to be verified in the field by the Contractor prior to performing the WORK. The CONTRACTOR shall uncover these pipes, ducts, cables, etc., carefully, by hand prior to installing his WORK. Any discrepancies or differences found shall be immediately brought to the attention of the EOR in order that necessary changes may be made to permit installation of the WORK.

4.3.2 Not Indicated: If an Underground Facility is uncovered or revealed at or contiguous to the site which was not shown, nor located by the facilities DISTRICT and which CONTRACTOR could not reasonably have been expected to be aware of, CONTRACTOR shall, promptly after becoming aware thereof and before performing any WORK affected thereby (except in an emergency as permitted by paragraph 6.10), identify to the DISTRICT of such Underground Facility and give written notice

thereof to that owner and to the DISTRICT and the CONSULTANT. The CONSULTANT shall promptly review the Underground Facility to determine the extent to which the Contract Documents should be modified to reflect and document the consequences of the existence of the Underground Facility, and the Contract Documents shall be amended or supplemented to the extent necessary. During such time, CONTRACTOR shall be responsible for the safety and protection of such Underground Facility as provided in paragraph 6.13.

4.4 DIFFERING SITE CONDITIONS

4.4.1 The CONTRACTOR shall notify the EOR in writing, of the following unforeseen conditions, hereinafter called differing Site conditions, promptly upon their discovery (but in no event later than 14 days after their discovery) and before they are disturbed:

4.4.1.1 Subsurface or latent physical conditions at the Site of the WORK differing materially from those indicated, described, or delineated in the Contract Documents, including those reports discussed in Paragraph 4.2 and 4.3; (Physical Conditions, Underground facilities) and

4.4.2.2 Any unknown physical conditions and the Site of the WORK of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents, including those reports and documents discussed in Paragraph 4.2 and 4.3.

4.4.2 EOR shall promptly review the pertinent conditions, determine the necessity of obtaining additional explorations or tests with respect thereto and advise the DISTRICT in writing (with a copy to the CONTRACTOR) of EOR'S findings and conclusions.

4.4.3 If EOR concludes that because of newly discovered conditions a change in the Contract Documents is required, a Change Order shall be issued as provided in Article 10 (Changes in the Work) to reflect and document the consequences of the difference.

4.4.4 In each such case, an increase or decrease in the Contract Price or an extension or shortening of the Contract Time, or any combination thereof, shall be allowable to the extent that they are attributable to any such inaccuracy or difference. If the DISTRICT and CONTRACTOR are unable to agree as to the amount or length thereof, a claim may be made therefor as provided in Article 11, Change of Contract Price, and Article 12, Change of Contract Time.

4.4.5 The CONTRACTOR'S failure to give notice of differing Site conditions within seven (7) days of their discovery and before they are disturbed shall constitute a waiver of all claims in connection therewith, whether direct or consequential in nature.

4.5 REFERENCE POINTS:

4.5.1 The DISTRICT shall provide, if available, engineering surveys to establish reference points for construction, which in EOR'S judgment are necessary to enable CONTRACTOR to proceed with the WORK.

4.5.2 CONTRACTOR shall be responsible for laying out the WORK (unless otherwise specified in the General Requirements), shall protect and preserve the established reference points and shall make no changes or relocations without the prior written approval of the DISTRICT. The CONTRACTOR shall report to the EOR whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points by professionally qualified personnel.



| Contract Amount | Best Key Rating |
|-----------------------------|-----------------------|
| Under \$500,000 | Class IX A or better |
| \$500,000 to \$2,499,999.99 | Class XI A or better |
| Over \$2,500,000 | Class XIV A or better |

ARTICLE 5 – BONDS AND INSURANCE

5.1 BONDS:

5.1.1 CONTRACTOR shall upon receipt of the notice of award furnish Performance and Payment Bonds, each in an amount at least ONE HUNDRED PERCENT (100%) of the Contract Price as security for the faithful performance and payment of all CONTRACTOR'S obligations under the Contract Documents. Said bonds must be provided to the DISTRICT within ten (10) business days of the Notice of Award or delivery of a Purchase Order. These Bonds shall remain in effect at least until one year after the date when final payment becomes due, except as otherwise provided by Law or Regulation or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds as are required by the Supplementary Conditions. Each Bond shall be furnished in an amount equal to ONE HUNDRED PERCENT 100% of the amount of the Contract award and recorded in the public records of the county where the improvement is located. The form and conditions of the Bonds and the Surety shall be as specified in the solicitation.

5.1.2 If requested by the District, the CONTRACTOR shall provide a Maintenance and Guaranty Bond in the amount of 50% of the Performance and Payment Bonds to provide a guarantee against defects in the WORK occurring during the year following the one-year correction period. The Bond shall be payable to the DISTRICT, and be at the sole cost of the CONTRACTOR. The form and conditions of the Bonds and the Surety shall be as specified and supplied by the DISTRICT in the Bid Documents.

5.1.3 The Surety shall be a nationally recognized Surety Company acceptable to the DISTRICT, listed on the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff, Bureau of Government Financial Operations, U.S. Treasury Department, and meet the other requirements of Florida Statutes Section 287.0935 (1989).

For projects exceeding five hundred thousand dollars, all bonds shall be placed with sureties with Best Ratings as stated below. The name, address and telephone number of the surety and its agent must be listed on the bond.

5.1.4 For contracts up to \$499,999.99 the surety shall have twice the minimum surplus and capital required by the Florida Insurance Code at the time the bid is issued for the Work, otherwise the surety shall have the following minimum ratings:

5.1.5 The Bond shall specifically incorporate and acknowledge the Surety's responsibility for liquidated damages.

5.1.6 Bonds shall be executed and issued by a resident agent, licensed and having an office in Palm Beach, Dade, Broward, St. Lucie, Indian River and Martin Counties, Florida, representing such corporate sureties.

5.1.7 If the CONTRACTOR is a partnership, the Bond shall be signed by each of the individuals who are partners; if a corporation, the Bond shall be signed in the correct corporate name by duly authorized officer, agent or attorney-in-fact. There

shall be executed an appropriate number of counterparts of the bond corresponding to the number of counterparts in the Contract. Each executed bond shall be accompanied by (a) appropriate acknowledgment of the respective parties; (b) appropriate duly certified copy of Power-of-Attorney or other certification of authority where bond is executed by agent, officer or other representative of Contractor or Surety; (c) duly certified extract from by-laws or resolutions of Surety under which Power-of-Attorney, or other certificate of Authority of its agent, officer or representative was issued.

5.1.8 If the surety on any Bond furnished by 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 paragraph 5.1.3 and 5.1.4, CONTRACTOR shall within five days thereafter substitute another Bond and Surety, both of which must be in conformance with paragraph 5.1.3 and 5.1.4. **Under no circumstances shall the successful CONTRACTOR begin WORK until he/she has supplied to the DISTRICT Performance and Payment Bonds and Affidavit for Bond using the DISTRICT form, and the DISTRICT has approved the bond. Contractor shall execute and record all bonds in the public records of the county where the improvement is located prior to delivering the bonds to the owner. Non-registered bonds shall be rejected.**

5.2 INSURANCE:

5.2.1 The CONTRACTOR agrees to, in the performance of work and services under this Agreement, comply with all Federal, state, and local laws and regulations now in effect, or hereinafter enacted during the term of this agreement that are applicable to the CONTRACTOR, its employees, agents, or subcontractors, if any, with respect to the work and services described herein. The CONTRACTOR shall obtain at CONTRACTOR's expense all necessary insurance in such form and amount as required by the District's Risk & Safety Officer before beginning work under this Agreement. The CONTRACTOR shall maintain such insurance in full force and effect during the life of this Agreement. The CONTRACTOR shall provide to the District's Risk & Safety Officer certificates of all insurance required under this section prior to beginning any work under this Agreement. The CONTRACTOR shall indemnify and save the District harmless from any damage resulting to it for failure of either CONTRACTOR or any subcontractor to obtain or maintain such insurance. The following are required types and minimum limits of insurance coverage, which the CONTRACTOR agrees to maintain during the term of this contract:

| Professional Liability | \$1,000,000 | \$2,000,000 |
|------------------------------|-------------|-------------|
| Line of Business/ Coverage | Occurrence | Aggregate |
| Commercial General Liability | \$1,000,000 | \$2,000,000 |

- Including:
- Premises/ Operations
- Contractual Liability
- Personal Injury
- Explosion, Collapse, Underground Hazard
- Products/Completed Operations
- Broad Form Property Damage
- Cross Liability and Severability of Interest Clause



| | | |
|---|--------------------|--------------------|
| Automobile Liability | \$1,000,000 | \$2,000,000 |
| (including owned, non-owned and hired) | | |

| | |
|---|---|
| Workers' Compensation & Employer's Liability | Statutory limits |
| | \$500,000 per each disease; \$500,000 per each accident; and \$500,000 each employee. |

5.2.2 The District reserves the right to require higher limits depending upon the scope of work under this Agreement.

5.2.3 Neither the CONTRACTOR nor any subcontractor shall commence work under this contract until they have obtained all insurance required under this section and have supplied the District with evidence of such coverage in the form of an insurance certificate and endorsement. The CONTRACTOR shall ensure that all subcontractors shall comply with the above guidelines and shall maintain the necessary coverage throughout the term of this Agreement.

5.2.4 All insurance carriers shall be rated at least A-VII per A.M. Best's Key Rating Guide and be licensed to do business in Florida. Policies shall be "Occurrence" form. Each carrier shall give the District sixty (60) days notice prior to cancellation.

5.2.5 The CONTRACTOR's general and automobile liability insurance policies shall be endorsed to add the Martin County School District, its board, employees, officers and agents as an "additional insured". The CONTRACTOR's Worker's Compensation carrier shall provide a Waiver of Subrogation to the District. The CONTRACTOR shall be responsible for the payment of all deductibles and self-insured retentions.

5.2.6 The District may require that the CONTRACTOR purchase a contract or performance bond equal to the cost of the project. If the CONTRACTOR is to provide professional services under this Agreement, the CONTRACTOR must provide the District with evidence of Professional Liability insurance with, at a minimum, a limit of \$1,000,000 per occurrence and \$2,000,000 in the aggregate. "Claims-Made" forms are acceptable for Professional Liability insurance.

5.2.7 The District may require higher limits for Professional Liability depending on the size of the project. In any event, the Bidder shall maintain such Professional Liability insurance in effect three (3) years after the completion of the project.

5.2.8 Should the District require the Bidder to carry Builders Risk insurance for the project, it must be in the amount equal to the full replacement cost of the project.

5.2.9 Fulfillment by the Bidder of the insurance provisions does **not** limit the Bidder's liability to the amount of the policy limits.

ARTICLE 6 – CONTRACTOR'S RESPONSIBILITIES

6.1 CONTRACTOR STATUS:

6.1.1 The Contractor is an independent contractor and is not an employee or agent of the DISTRICT. Nothing in this Contract shall be interpreted to establish any relationship other than that of an independent contractor, between the DISTRICT and the Contractor, its employees, agents, subcontractors, or assigns, during or after the performance of this Contract. The Contractor shall take the whole responsibility for the means, methods, techniques, sequences, and production of the Work.

6.2 CONTRACTOR RISK:

6.2.1 The Contractor shall bear all losses resulting to him, or its, on account of the amount or character of the Work, or because of the nature of the ground beneath, in or on which the Work is done is different from what was assumed or expected, or because of bad weather, or because of errors or omissions in his or its bid on the Contract price, or except as otherwise provided in the Contract Documents because of any other causes whatsoever. Execution of this Contract by the Contractor is a representation that the Contractor has visited the site, has conducted a sufficient investigation of the surface and sub-surface conditions in order to submit its bid, has become familiar with the local conditions under which the Work is to be performed, and correlated personal observations with the requirements of the Contract Documents.

6.2.2 The Contractor shall protect the entire Work, all materials under the Contract and the DISTRICT's property (including machinery and equipment) in, or on, or adjacent to the site of the Work until final completion and Work, from the action of the elements, acts of other contractors, or except as otherwise provided in the Contract Documents, and from any other causes whatsoever; should any damage occur by reason of any of the foregoing, the Contractor shall repair at his, or its, own expenses to the satisfaction of the DISTRICT or its Project Manager. Neither the DISTRICT nor its officers, employees or agents assume any responsibility for collection of indemnities or damages from any person or persons causing injury to the Work of the Contractor.

6.2.3 At his, or its expense, the Contractor shall take all necessary precautions (including without limitation) the furnishing of guards, fences, warnings signs, walks, flags, cables and lights for the safety of and the prevention of injury, loss and damage to persons and property (including without limitation) in the term persons, members of the public, the DISTRICT and its employees and agents, the Project Manager and his employees, Contractor's employees, his or its subcontractors and their respective employees, other contractors, their subcontractors and respective employees, on, about or adjacent to the premises where said Work is being performed, and shall comply with all applicable provisions of safety laws, rules, ordinances, regulations and orders of duly constituted public authorities and building codes.

6.2.4 The Contractor assumes all risk of loss, damage and destruction to all of his or its materials, tools appliances and property of every description and that of his or its subcontractors and of their respective employees or agents, and injury to or death of the Contractor, his or its employees, subcontractors or their respective employees or agents, including legal fees, court costs or other legal expenses, arising out of or in connection with the performance of this Contract.

6.3 SUPERVISION AND SUPERINTENDENCE:

6.3.1 The CONTRACTOR shall supervise and direct the Work. He shall be solely responsible for the means, methods, techniques, sequences and procedures of construction. The CONTRACTOR shall employ and maintain on the Work a qualified supervisor or superintendent who shall have been designated in writing by the CONTRACTOR as the CONTRACTOR'S representative at the site. The supervisor shall have full authority to act on behalf of the CONTRACTOR and all communications given to the supervisor shall be as binding as if given to the CONTRACTOR. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the Work. (Copies of written communications given to the Superintendent shall be mailed to the Contractor's home office.)

6.4 LABOR, MATERIALS AND EQUIPMENT: CONDITIONS, SUBSTITUTIONS

Related Article: 6.40; Product Substitution Requirements and Procedures



6.4.1 The CONTRACTOR shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. He shall at all times maintain good discipline and order at the site. 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 Contract Documents, all Work at the site shall be performed during regular working hours, and CONTRACTOR shall not permit overtime work or the performance of Work on Saturday, Sunday or any legal holiday, observed by the DISTRICT, without the DISTRICT'S PROJECT MANAGER'S written consent.

6.4.2 Materials and Equipment: 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 the Work. All material stored on the job site shall remain the responsibility of the CONTRACTOR until incorporated into the work. The DISTRICT shall not reimburse the CONTRACTOR for materials lost, stolen, or damaged while stored on the job site.

6.4.3 Condition of Materials: All materials and products supplied by the Bidder in conjunction with this bid shall be new, warranted for their merchantability, fit for a particular purpose, free from defects and consistent with industry standards. The products shall be delivered to the District in excellent condition. When special makes or grades of material which are normally packaged by the supplier or manufacturer are specified or approved, such materials shall be delivered to the site in their original packages or container with seals unbroken and labels intact. In the event that any of the products supplied to the District are found to be defective or do not conform to the specifications, the District reserves the right to return the product to the Bidder at no cost to the District.

6.4.4 Installation / Assembly: All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable manufacturer, fabricator or processors, except as otherwise provided in the Contract Documents.

6.4.5 Materials, Equipment, Products, and Substitutions: Materials, equipment and products incorporated in the Work must be approved for use before being purchased by the CONTRACTOR. The CONTRACTOR shall submit to the EOR and the DISTRICT'S PROJECT MANAGER a list of proposed materials, equipment or products, together with such samples as may be necessary for him to determine their acceptability and obtain his approval, per Section III General Terms and Conditions if prior to award, or after award, within ten (10) calendar days after the CONTRACTOR should have been aware of then need for substitution, unless otherwise stipulated in the Special Conditions. No request for payment for "or equal" equipment shall be approved until this list has been received and approved by the EOR. The District may require the CONTRACTOR to furnish at CONTRACTOR'S expense a special performance guarantee or other surety with respect to any substitute.

6.4.6 Should any work or materials, equipment or products not conform with requirements of the Drawings and Specifications or become damaged during the progress of the Work, such Work or materials shall be removed and replaced, together with any work disarranged by such alterations, at any time before completion and acceptance of the Project. All such work shall be done at the expense of the CONTRACTOR.

6.4.7 No materials or supplies for the Work shall be purchased by the CONTRACTOR or by any Subcontractor subject to any chattel mortgage or under a conditional sale or

other agreement by which an interest is retained by the Seller. The CONTRACTOR warrants that he has good title to all materials and supplies used by him in the Work.

6.4.8 If a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, sequence, technique or procedure of construction if acceptable to the DISTRICT and EOR, if CONTRACTOR submits sufficient information to allow DISTRICT and EOR to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents. The procedure for review by DISTRICT and EOR shall be similar to that provided in paragraph 6.4.5 (Materials, Equipment, Products and Substitutions) as applied by EOR and as may be supplemented in the Technical Specifications.

6.4.9 Any two (2) or more pieces of material or equipment of the same kind, type or classification, and being used for identical types of service, shall be made by the same manufacturer.

6.4.10 The successful CONTRACTOR shall furnish all guarantees and warranties to the Purchasing Department prior to final acceptance and payment. The warranty period shall commence upon final acceptance of the product.

6.5 CONCERNING SUBCONTRACTORS:

6.5.1 The CONTRACTOR shall not employ any Subcontractor, other person or organization (whether initially or as a substitute) against whom the DISTRICT or the EOR may have reasonable objection, nor shall the CONTRACTOR be required to employ any Subcontractor against whom he has reasonable objection. The CONTRACTOR shall not make any substitution for any Subcontractor who has been accepted by the DISTRICT'S PROJECT MANAGER and the EOR, unless the EOR determines that there is good cause for doing so. If after bid opening and prior to the award of the contract, the DISTRICT objects to certain suppliers or subcontractors, the DISTRICT may permit CONTRACTOR to submit an acceptable substitute so long as there is no change in the contract price or contract time. If the contract price or contract time is increased, the DISTRICT may return the bid bond and award the contract to the next qualified, competent BIDDER. If after the award of the contract, the DISTRICT objects to certain suppliers or subcontractors, the DISTRICT shall permit CONTRACTOR to make an appropriate and acceptable substitution which is also acceptable to the DISTRICT. No acceptance by the DISTRICT or the EOR of any such Subcontractor, supplier or other person or organization shall constitute a waiver of any right of the DISTRICT or EOR to reject defective WORK.

6.5.2 Responsibility: The 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 DISTRICT or EOR and any Subcontractor or other person or organization having a direct contract with CONTRACTOR, nor shall it create any obligation on the part of DISTRICT or EOR to pay or to see to the payment of any moneys due any Subcontractor or other person or organization, except as may otherwise be required by law. DISTRICT or EOR may furnish to any Subcontractor or other person or organization, to the extent practicable, evidence of amounts paid to CONTRACTOR on account of specific Work done in accordance with the schedule of values.

6.5.3 Division of Work: The divisions and sections of the Specifications and the identifications of any Drawings shall not



control the CONTRACTOR in dividing the Work among Subcontractors or delineating the Work to be performed by any specific trade.

6.5.4 Terms and Conditions: The CONTRACTOR agrees to bind specifically every Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of the DISTRICT.

6.5.5 Agreement: All Work performed for the CONTRACTOR by a Subcontractor shall be pursuant to any appropriate agreement between the CONTRACTOR and the Subcontractor.

6.5.6 Responsibility: The CONTRACTOR shall be responsible for the coordination of the trades, Subcontractors and material men engaged upon His Work.

6.5.7 The CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the Work to bind Subcontractors to the CONTRACTOR by the terms of these General Conditions and other Contract Documents insofar as applicable to the Work of Subcontractors, and to give the CONTRACTOR the same power as regards terminating any subcontract that the DISTRICT may exercise over the CONTRACTOR under any provisions of the Contract Documents.

6.5.8 The DISTRICT or EOR shall not undertake to settle any differences between the CONTRACTOR and his Subcontractors or between Subcontractors.

6.5.9 If in the opinion of the DISTRICT'S PROJECT MANAGER or EOR, any Subcontractor on the Project proves to be incompetent or otherwise unsatisfactory, he shall be replaced if and when directed in writing.

6.5.10 CONTRACTOR shall also:

6.5.10.1 Observe work of each subcontractor to monitor compliance with schedule.

6.5.10.2 Verify that labor and equipment are adequate for the work and the schedule.

6.5.10.3 Verify that product procurement schedules are adequate.

6.5.10.4 Verify that product deliveries are adequate to maintain schedule.

6.5.10.5 Report noncompliance to EOR, with recommendation for changes

6.6 PATENT, FEES AND ROYALTIES:

6.6.1 The CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use of any invention, design, process or device which is the subject of patent rights or copyrights held by others. He shall indemnify and hold harmless the DISTRICT and EOR and anyone directly or indirectly employed by either of them from and against all claims, damages, losses and expenses (including attorney's fees) arising out of any infringement of such rights during or after completion of the Work, and shall defend all such claims in connection with any alleged infringement of such rights.

6.6.2 Patent Rights: The CONTRACTOR shall be responsible for determining the application of patent rights and royalties on materials, appliances, articles or systems prior to bidding. However, he shall not be responsible for such determination on systems which do not involve purchase by him of materials, appliances and articles.

6.7 PERMITS, LAWS AND REGULATIONS:

6.7.1 Permits: The CONTRACTOR shall secure and pay for all construction permits and licenses and shall pay all governmental charges and inspection fees necessary for the

prosecution of the Work, which are applicable at the time of his Bid. The DISTRICT shall assist the CONTRACTOR, when necessary, in obtaining such permits and licenses. The DISTRICT shall be invoiced at actual cost without markup.

6.7.2 The CONTRACTOR shall also pay all public utility charges. The Contractor shall be responsible for obtaining dewatering permits as required. CONTRACTOR shall be responsible for complying with the South Florida Water Management District, Florida Department of Environmental Regulation, United States Environmental Protection Agency and any other regulatory agency requirements including financial responsibility (fines, etc.).

6.7.2 Laws 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 Drawings are at variance therewith, he shall give the EOR prompt written notice thereof, and any necessary changes shall be adjusted by an appropriate Modification. If the CONTRACTOR performs any Work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the EOR, he shall bear all costs arising therefrom; however, it shall not be his primary responsibility to make certain that the Drawings and Specifications are in accordance with such laws, ordinances, rules and regulations.

6.8 TAXES:

6.8.1 Cost of all sales and other taxes for which the CONTRACTOR is liable under the Contract shall be included in the Contract Price stated by the CONTRACTOR.

6.9 RECORD DOCUMENTS/RIGHT TO AUDIT:

6.9.1 The CONTRACTOR shall keep in a safe place one record copy of all Specifications, Drawings, Addenda, Modifications, and Shop Drawings at the site in good order and annotated to show all changes made during the construction process. These shall be available to the EOR and shall be delivered to him for the DISTRICT upon completion of the project. It shall be used for this purpose only. Final acceptance of the project shall be withheld until approval of the documents is made by the DISTRICT'S PROJECT MANAGER.

6.9.2 The awarded CONTRACTOR shall maintain during the term of the contract all books, reports and records in accordance with generally accepted accounting practices and standards for records directly related to this contract. The form of all records and reports shall be subject to the approval of the District's Auditor. The awarded CONTRACTOR agrees to make available to the District's Auditor, during normal business hours all books of account, reports and records relating to this contract for the duration of the contract and retain them for a minimum period of three (3) years beyond the last day of the contract term.

6.9.3 If the CONTRACTOR submits a claim to the DISTRICT for additional compensation, the DISTRICT shall have the right, as a condition to considering the claim, and as a basis for evaluation of the claim, and until the claim has been settled, to audit the CONTRACTOR'S books to the extent they are relevant. This right shall include the right to examine books, records, documents, and other evidence and accounting procedures and practices, sufficient to discover and verify all direct and indirect costs of whatever nature claimed to have been incurred or anticipated to be incurred and for which claim has been submitted. The right to audit shall include the right to inspect the CONTRACTOR'S plants, or such parts thereof, as may be or have been engaged in the performance of the WORK. The CONTRACTOR further agrees that the right to audit encompasses all subcontracts and is binding upon all subcontractors. The rights to examine and inspect herein provided for shall be exercisable through such representatives as the DISTRICT deems desirable during the CONTRACTOR'S



normal business hours at the office of the CONTRACTOR. The accounting records and documents, and other financial data, and upon request, shall submit true copies of requested records to the DISTRICT.

6.10 SAFETY, PROTECTION, STORAGE AND EMERGENCIES:

Related Articles:

- 6.2-Contractor Risk and Work Protection
- 6.21-Protection of Existing Property Improvements
- 6.38-Temporary barriers and Enclosures
- 6.39-Security

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

6.10.1.1 All employees on the Work and other persons who may be affected thereby,

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

6.10.1.3 Store and protect Products in accordance with manufacturers' instructions, with seals and labels intact and legible.

6.10.1.4 Store sensitive Products in weather tight, climate controlled enclosures.

6.10.1.5 For exterior storage of fabricated Products, place on sloped supports, above ground.

6.10.1.6 Cover Products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation or potential degradation of Product.

6.10.1.7 Store loose granular materials on solid flat surfaces in a well drained area. Prevent mixing with foreign matter.

6.10.1.8 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.

6.10.2. CONTRACTOR shall comply with all applicable laws, ordinances, rules and regulations of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss on or off the WORK and shall erect and maintain all necessary safeguards for such safety and protection.

6.10.3 CONTRACTOR shall notify owners of adjacent property and of Underground Facilities and utility owners when prosecution of the WORK may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property.

6.10.4 All damage, injury or loss to any property referred to in paragraph 6.10.1.2. or 6.10.1.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor, Supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the WORK for anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of the DISTRICT or the EOR or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of CONTRACTOR).

6.10.5 CONTRACTOR'S duties and responsibilities for the safety and protection of the WORK shall continue until such time as all the WORK is completed and EOR has issued a notice to the DISTRICT and CONTRACTOR in accordance with paragraph 14.6.(Substantial Completion) that the WORK is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.10.6 The safety provisions of applicable laws and building and construction codes shall be observed and the Contractor shall take or cause to be taken such additional safety and health measures as the Local Public Agency involved may determine to be reasonably necessary. Machinery, equipment and all hazards shall be guarded in accordance with the safety provisions of the "Manual of Accident Prevention in Construction" as published by the Associated General Contractors of America, Inc., to the extent that such provisions are not in conflict with applicable laws.

6.10.7 The Contractor shall maintain an accurate record of all cases of death, occupational disease, or injury requiring medical attention or causing loss of time from WORK, arising out of an and in the course of employment on WORK under the Contract. The Contractor shall promptly furnish the Local Public Agency with reports concerning these matters.

6.10.8 SAFETY REPRESENTATIVE: CONTRACTOR shall designate a responsible representative at the site whose duty shall be the prevention of accidents. This person shall be CONTRACTOR'S superintendent unless otherwise designated in writing by CONTRACTOR to the DISTRICT.

6.10.9 HAZARD COMMUNICATION PROGRAMS: CONTRACTOR shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employees at the Site in accordance with Laws and Regulations.

6.10.10 SUPERINTENDENT: The CONTRACTOR shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be the CONTRACTOR'S superintendent unless otherwise designated in writing by the CONTRACTOR to the DISTRICT'S PROJECT MANAGER.

6.10.11 EMERGENCIES: In emergencies affecting the safety of persons or the Work or property at the site or adjacent thereto, the CONTRACTOR, without special instruction or authorization from the EOR or the DISTRICT'S PROJECT MANAGER, is obligated to act, at his discretion, to prevent threatened damage, injury or loss.

6.10.11.1 CONTRACTOR shall give DISTRICT PROJECT Representative and EOR prompt written notice if CONTRACTOR believes that any significant changes in the WORK or variations from the Contract Documents have been caused thereby. If EOR determines that a change in the Contract Documents is required because of the action taken in response to an emergency, or Change Order shall be issued to document the consequences of the changes or variations.

6.10.11.2 During adverse weather, and against the possibility thereof, the CONTRACTOR shall take all necessary precautions to ensure that the WORK shall be done in a good and workmanlike condition and is satisfactory in all respects. When required, protection shall be provided by the use of tarpaulins, wood and building paper shelters, or other acceptable means. The CONTRACTOR shall be responsible for all changes caused by adverse weather, including unusually high winds and water levels and he shall take such precautions and procure such additional insurance as he deems prudent. The EOR may suspend construction operations at any time when, in his



judgment, the conditions are unsuitable or the proper precautions are not being taken, whatever the weather or water level conditions may be, in any season.

6.10.11.3 If the CONTRACTOR believes that additional work done by him in an emergency which arose from causes beyond his control entitles him to an increase in the Contract Price or an extension of the Contract Time, he may make a claim therefore as provided in Articles 11 (Change in Contract Price) and 12, (Change in Contract Time).

6.10.12. **NATIONAL EMERGENCY:** In the event the DISTRICT is prevented from proceeding with any or all of this WORK as stated in this Contract, due to a declaration of war, or national emergency by the United States government, whereas the construction of the type contracted for herein is specifically prohibited by statute or governmental edict, or due to the stoppage of construction caused by any governmental agency, State, DISTRICT, Town, or County regulations, orders, restrictions, or due to circumstances beyond the DISTRICT'S control, then the DISTRICT herein reserves the right to either suspend the WORK to be done for an indefinite period of time or to cancel this Contract outright by giving notice by registered mail of such intention to the CONTRACTOR herein. In the event of any conditions above mentioned occurring after the WORK herein has already been commenced, then the DISTRICT herein shall be liable for only the cancellation or suspension without the addition of prospective profits or other changes whatsoever.

6.11 SHOP DRAWINGS AND SAMPLES:

Related Article 6.41: Field Samples and Mockups

6.11.1 SHOP DRAWINGS: After checking and verifying all field measurements, the CONTRACTOR shall submit to the CONSULTANT and the DISTRICT'S PROJECT MANAGER for review, in accordance with the accepted schedule of Shop Drawing submissions (see paragraph 2.9) copies (or at the CONSULTANT'S option, one reproducible copy) of all Shop Drawings, which shall have been checked by and stamped with the approval of the CONTRACTOR. The data shown on the Shop Drawings shall be complete with respect to dimensions, design criteria, materials of construction and the like to enable the EOR to review the information as required.

Shop drawings shall include, but not be limited to the following information:

- 6.11.1.2 Fabrication and installation Drawings and details.
- 6.11.1.3 Template placement diagrams.
- 6.11.1.4 Manufacturer's installation instructions.
- 6.11.1.5 Product patterns and colors.
- 6.11.1.6 Coordination Drawings.
- 6.11.1.7 Schedules.
- 6.11.1.8 Product mix formulae.
- 6.11.1.9 Product design or engineering calculations.
- 6.11.1.10 Other information as required by project.

After review, produce copies and distribute per Submittal Procedures article above and for record documents purposes described in Section 6.37 Closeout Submittals.

Submit to EOR for purpose of checking conformance with information given and design concept and District's Project Manager.

6.11.2 SAMPLES: The CONTRACTOR shall also submit to the EOR for review, with such promptness as to cause no delay in Work, all samples required by the Contract Documents. All samples shall have been checked by and stamped with the

approval of the CONTRACTOR, identified clearly as to material, manufacturer, any pertinent catalog numbers and the use for which intended.

Contractor shall submit to Consultant for purpose of checking conformance with information given and design concept expressed in the documents.

After review, Consultant shall submit color board to District's Project Manager per Submittal Procedures. Samples shall also conform to the following:

6.11.2.1 Sample finishes and colors shall be from full range of manufactures' standard colors, textures, and patterns for Consultant's selection and preparation of color board for District's approval.

6.11.2.2 After review and approval by District, provide duplicates and distribute per Submittal Procedures.

6.11.2.3 Submit samples to illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.

6.11.2.4 Include identification on each sample, with full project information.

6.11.2.5 Submit number of samples specified in specification, one of which Consultant shall retain.

Reviewed samples may be used in work, if indicated.

6.11.3 DEVIATIONS: At the time of each submission, the CONTRACTOR shall in writing call the EOR'S attention to any deviations that the Shop Drawings or sample may have from the requirements of the Contract Documents.

6.11.4 CONFORMANCE REVIEW: The EOR shall review within ten (10) days or as extended by District Shop Drawings and samples, but his review shall be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents. The review of a separate item as such shall not indicate review of the assembly in which the item functions. The CONTRACTOR shall make any corrections required by the EOR at CONTRACTOR'S expense and shall return the required number of corrected copies of Shop Drawings and resubmit new samples until the review is satisfactory to the EOR. The CONTRACTOR shall direct specific attention in writing or on resubmitted Shop Drawings to revisions other than the corrections called for by the CONSULTANT on previous submissions. The CONTRACTOR'S stamp of approval on any Shop Drawings or sample shall constitute a representation to the DISTRICT and the EOR that the CONTRACTOR has either determined and verified all quantities, dimensions, field construction criteria, materials, catalogue numbers and similar data or he assumes full responsibility for doing so, and that he has reviewed or coordinated each Shop Drawing or sample with the requirements of the Work and the Contract Documents. Shop Drawings submitted without the CONTRACTOR'S stamp or specific written indication shall be returned without action. Shop Drawings and submittal data shall be reviewed two times, thereafter all further review time shall be charged to the CONTRACTOR.

6.11.5 APPROVAL: No work requiring a Shop Drawing or sample submission shall be commenced until the submission has been reviewed and approved by the EORT. A copy of each Shop Drawing and each approved sample shall be kept in good order by the CONTRACTOR at the site and shall be available to the EOR.

6.11.6 SPECIFIC DEVIATIONS: The EOR'S review of Shop Drawings or samples shall not relieve the CONTRACTOR from his responsibility for any deviations from the requirements of the Contract Documents unless the CONTRACTOR has in writing



called the EOR'S attention to such deviation at the time of submission and the EOR has given written approval to the specific deviation, nor shall any review by the EOR relieve the CONTRACTOR from responsibility for errors or omissions in the Shop Drawings.

6.11.7 Where a Shop Drawing or sample is required by the Specifications, any related WORK performed prior to EOR'S review and acceptance of the pertinent submission shall be the sole expense and responsibility of CONTRACTOR.

6.12 SITE CLEAN UP:

6.12.1 SITE: The CONTRACTOR shall clean up behind the Work as much as is reasonably possible as the Work progresses. Upon completion of the Work, and before acceptance of and final payment for the Project by the DISTRICT, the CONTRACTOR shall remove all his surplus and discarded materials, excavated material and rubbish from the roadways, sidewalks, parking areas, lawns and all adjacent property; shall clean his portion of Work involved in any building under this Contract, so that no further cleaning by the DISTRICT is necessary prior to his occupancy; shall restore all property, both public and private, which has been disturbed or damaged during the prosecution of the Work; and shall leave the whole in a neat and presentable condition.

6.12.2 BUILDING CLEAN-UP: Clean-up operations shall consistently be carried on by the CONTRACTOR at all times to keep the premises free from accumulation of waste materials and rubbish. Upon completion of the Work he shall remove all rubbish, tools, scaffolding, surplus materials, etc., from the building and shall leave his work "broom clean", or its equivalent, unless more exactly specified elsewhere in the Contract. The CONTRACTOR shall do the following special cleaning for all trades upon completion of the Work:

6.12.2.1 Remove putty stains and paint from and wash and polish all glass. Do not scratch or otherwise damage glass.

6.12.2.2 Remove all marks, stains, fingerprints and other soil and dirt from painted, stained and decorated work.

6.12.2.3 Remove all temporary protections and clean and polish floors.

6.12.2.4 Clean and polish all hardware for all trades; this shall include removal of all stains, dust, dirt, paint, etc.

6.12.2.5 General: In case of dispute, the DISTRICT may remove the rubbish and charge the cost to the CONTRACTOR.

6.13 PUBLIC CONVENIENCE AND SAFETY:

6.13.1 Convenience: The CONTRACTOR shall, at all times, conduct the Work in such a manner as to insure the least practicable obstruction to public travel. The convenience of the general public and of the residents along and adjacent to the area of the Work shall be provided for in a satisfactory manner, consistent with the operation and local conditions.

6.13.2 Safety: "Street Closed" signs shall be placed immediately adjacent to the Work, in a conspicuous position, at such locations as traffic demands. At any time that streets are required to be closed, Contractor shall obtain approval to close the street from the appropriate regulatory agencies having jurisdiction. The CONTRACTOR shall notify law enforcement agencies, fire departments, and parties operating emergency vehicles before the street is closed and again as soon as it is opened. Approval from the DISTRICT shall be coordinated through the office of the Director of Facilities including notification of the news media and affected property owners. Access to fire hydrants and other fire extinguishing equipment shall be provided and maintained at all times. Traffic paths shall be maintained for local traffic.

6.14 SANITARY PROVISIONS:

6.14.1 The CONTRACTOR shall furnish necessary toilet conveniences, secluded from public observation, for use of all personnel on the Work, whether or not in his employ. They shall be kept in a clean and sanitary condition and shall comply with the requirements and regulations of the Public Authorities having jurisdiction. He shall commit no public nuisance. Temporary sanitary facilities shall be removed upon completion of the Work and the premises shall be left clean.

6.15 INDEMNIFICATION:

6.15.1 CONTRACTOR agrees to protect, defend, indemnify, and hold harmless the District, its employees, representatives, and elected officials from any and all claims and liabilities including all attorney's fees and court costs, including appeals, for which the District, its employees, representatives, and elected officials can or may be held liable as a result of injury (including death) to persons or damage to property occurring by reason of any negligence, recklessness, or intentional wrongful misconduct of the CONTRACTOR, its employees, or agents, arising out of or connected with this Agreement. The CONTRACTOR shall not be required to indemnify the District or its agents, employees, representatives, or elected officials when an occurrence results solely from the wrongful acts or omissions of the District, or its agents, employees or representatives.

6.15.2 The CONTRACTOR, without exemption, shall indemnify and hold harmless, the District, its employees, representatives and elected officials from liability of any nature or kind, including cost and expenses for or on account of any copyrighted, service marked, trademarked patented or unpatented invention, process, or any other intellectual property right or item manufactured by the CONTRACTOR. Further, if such a claim is made, or is pending, the CONTRACTOR may, at its option and expense, procure for the District the right to use, replace, or modify the item to render it non-infringing. If none of the alternatives are reasonably available, the District agrees to return the article on request to the CONTRACTOR and receive reimbursement from the CONTRACTOR. If the CONTRACTOR used any design, device or materials covered by letters, patent or copyright, it is mutually agreed and understood, without exception, that the Bid prices shall include all royalties or cost arising from the use of such design, device or materials in any way involved in the work. This article shall survive the termination of any contract with the School District.

6.15.3 The parties agree that Ten Dollars (\$10.00) of the total compensation paid to the Bidder for performance of this Agreement shall represent the specific consideration for the Bidder's indemnification of the Owner.

6.15.4 The District reserves the right to select its own legal counsel to conduct any defense in any such proceeding and all costs and fees associated therewith shall be the responsibility of CONTRACTOR under the indemnification agreement.

6.15.5 It is the specific intent of the parties hereto that the foregoing indemnification complies with F.S. 725.06 (Chapter 725). It is further the specific intent and agreement of the parties that all of the Contract Documents on this Project are hereby amended to include the foregoing indemnification and the "Specific Consideration" therefore.

6.15.6 Nothing contained herein is intended nor shall be construed to waive District's rights and immunities under the common law or Florida Statutes 768.28, as amended from time to time.

6.16 CLAIMS:

6.16.1 In any and all claims against the DISTRICT or the EOR or any of their agents or employees, by any employee of the CONTRACTOR, any Subcontractor, anyone directly or indirectly



employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 6.15 (Indemnification) shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any Subcontractor under worker's compensation acts, disability benefit acts or other employee benefit acts.

6.16.2 Obligation: The obligations of the CONTRACTOR under paragraph 6.13 shall not extend to the liability of the EOR'S negligent acts, errors or omissions or those of his employees or agents.

6.17 RESPONSIBILITY FOR CONNECTING TO EXISTING WORK:

6.17.1 It shall be the express responsibility of the CONTRACTOR to connect his Work to each part of the existing work or work previously installed as required by the Drawings and Specifications to provide a complete installation.

618 WORK IN STREET, HIGHWAY AND OTHER RIGHTS-OF-WAY: (move to 4.1 section)

6.18.1 Excavation, grading, fill, storm drainage, paving and any other construction or installations in rights-of-way of streets, highways, public carrier lines, utility lines (either aerial, surface or subsurface), etc., shall be done in accordance with requirements of these Specifications and authorities having jurisdiction. The CONTRACTOR shall be responsible for obtaining all permits necessary for the work. Upon completion of the Work, CONTRACTOR shall present to EOR certificates, in triplicate, from the proper authorities stating that the Work has been done in accordance with their requirements.

6.18.2 The DISTRICT shall cooperate with the CONTRACTOR in obtaining action from any utilities or public authorities involved in the above requirements.

6.19 COOPERATION WITH GOVERNMENTAL DEPARTMENTS, PUBLIC UTILITIES, ETC.:

6.19.1 The CONTRACTOR shall be responsible for making all necessary arrangements with governmental departments, public utilities, public carriers, service companies and corporations owning or controlling roadways, railways, water, sewer, gas, electrical, cable television, telephone, and telegraph facilities such as pavements, tracks, piping, wires, cables, conduits, poles, guys, etc., including incidental structures connected therewith, that are encountered in the Work in order that such items may be properly shored, supported and protected, or the CONTRACTOR may relocate them with Utility Owner's approval, if he so desires.

6.19.2 NOTICES: The CONTRACTOR shall give all proper notices, shall comply with requirements of such parties in the performance of his Work, shall permit entrance of such parties on the Project in order that they may perform their necessary work, and shall pay all charges and fees made by such parties for this work.

6.19.3 GOVERNMENT AGENCY CAUSED DELAYS: The CONTRACTOR'S attention is called to the fact that there may be delays on the Project due to work to be done by governmental departments, public utilities, and others in repairing or moving poles, conduits, etc. The CONTRACTOR shall cooperate with the above parties, in every way possible, so that the construction can be completed in the least possible time.

6.19.4 CODES, LAWS, ORDINANCES AND REGULATIONS: The CONTRACTOR shall have made himself familiar with all codes, laws, ordinances and regulations which in any manner affect those engaged in the Work, or materials and equipment used in or upon the Work, or in any way affect the

conduct of the Work, and no plea of misunderstanding shall be considered on account of his ignorance thereof.

6.20 USE OF PREMISES: (move to contractor responsibilities)

6.20.1 CONTRACTOR shall confine construction equipment, the storage of materials and equipment and the operations of workers to the project site and land and areas identified in and permitted by the Contract Documents and other land and areas permitted by laws, ordinances, and regulations, rights-of-way, permits, easements, and directions of the DISTRICT'S REPRESENTATIVE, and shall not reasonably encumber the premises with construction equipment or other materials or equipment.

6.20.2 CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the DISTRICT or occupant thereof or of any land or areas contiguous thereto, resulting from the performance of the WORK. Should any claim be made against the DISTRICT or EOR by any such owner or occupant because of the performance of the WORK, CONTRACTOR shall promptly attempt to settle with such other party by Contract or otherwise resolve the claim. CONTRACTOR shall, to the fullest extent permitted by laws and regulations, indemnify and hold the DISTRICT and EOR harmless from and against all claims, damages, losses and expenses (including, but not limited to, fees of engineers, architects, attorneys and other professionals and court costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any such other party against the DISTRICT or EOR to the extent based on a claim arising out of CONTRACTOR'S performance of the WORK.

6.20.3. During the progress of the WORK, CONTRACTOR shall keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the WORK. At the completion of the WORK 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 DISTRICT. CONTRACTOR shall restore to original condition all property not designated for alteration by the Contract Documents.

6.20.4 CONTRACTOR shall not overload or permit any part of any structure to be loaded with such weight as shall endanger its safety, nor shall he subject any part of the Work to stresses or pressures that shall endanger it.

6.20.5 CONTRACTOR shall enforce the DISTRICT'S PROJECT MANAGER'S instructions in connection with signs, advertisements, fires and smoking.

6.20.6 CONTRACTOR shall arrange and cooperate with DISTRICT in routing and parking of automobiles of his employees, Subcontractors and other personnel, and in routing material delivery trucks and other vehicles to the Project site.

6.21 PROTECTION OF EXISTING PROPERTY IMPROVEMENTS:

Related Articles:

- 6.2- Contractor Risk and Work Protection
- 6.10-Safety, Protection, Storage and emergencies
- 6.38-Temporary barriers and Enclosures
- 6.39-Security

6.21.2 Any existing surface or subsurface improvements, such as pavements, curbs, sidewalks, pipes or utilities, footings, or structures (including portions thereof), trees and shrubbery, not indicated on the Drawings or noted in the Specifications as being removed or altered shall be protected from damage during construction of the Project. Any such improvements damaged



during construction of the Project, whether or not such improvements appear on the drawings, shall be restored to a condition equal, or better, to that existing at time of award of Contract. Such restoration or repair shall be at the sole expense of the Contractor, and no claim for an increase in the Contract Price under paragraph 6.21 or under Article 10 shall be allowed.

6.22 TEMPORARY HEAT:

6.22.1 The CONTRACTOR shall provide heat, fuel and services as necessary to protect all work and materials, within all habitable areas of permanent building construction, for all contracts against injury from dampness and cold until final acceptance of all work and materials for the Project, unless building is fully occupied by the DISTRICT prior to such acceptance, in which case the DISTRICT shall assume all expenses of heating from date of full occupancy. Unless otherwise specifically permitted by Special Conditions, the permanent heating system shall not be used to provide temporary heat. CONTRACTOR'S proposed methods of heating shall be submitted for approval.

6.23. SCHEDULE

6.23.1 CONTRACTOR shall submit to EOR for review and comment (to the extent indicated in paragraph 2.6.Finalizing Schedule) proposed adjustments in the progress schedule to reflect the impact thereon of new developments; these shall conform generally to the progress schedule then in effect and additionally shall comply with any provisions of the General Requirements applicable thereto. All approved changes shall be memorialized as change orders.

6.24 CONTINUING THE WORK:

6.24.1 CONTRACTOR shall carry on the WORK and adhere to the progress schedule during all disputes or disagreements with the DISTRICT. No WORK shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Article 15 (Suspension and termination of Work) or as CONTRACTOR and the DISTRICT may otherwise agree in writing.

6.25 CONTRACTOR'S GENERAL WARRANTY AND GUARANTEE:

Related Articles: Warranties Attachment 14.4, Contractor's Warranty of Title

6.25.1 CONTRACTOR warrants and guarantees to DISTRICT and EOR that all work shall be in accordance with the Contract Documents and shall not be *defective*. That Contractor guarantees to repair, replace or otherwise make good to the satisfaction of the DISTRICT any defect in workmanship or material appearing in the Work; and further guarantees the successful performance of the Work for the service intended.

Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

6.25.1.1 Abuse, modification or improper maintenance or operation by persons other than CONTRACTOR, Subcontractors or Suppliers; or;

6.25.1.2 Normal wear and tear under normal usage.

6.25.2 Contractor's obligation to perform and complete the WORK in accordance with the Contract Documents shall be absolute. None of the following shall constitute an acceptance of WORK that is not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the WORK in accordance with the Contract Documents:

6.25.2.1 Observations by EOR;

6.25.2.2 Recommendation of any progress or final payment by EOR;

Section IV

6.16.2.3 The issuance of a certificate of Substantial Completion or any payment by DISTRICT to CONTRACTOR under the Contract Documents;

6.25.2.4 Use or occupancy of the WORK or any part thereof by DISTRICT;

6.25.2.5 Any acceptance by DISTRICT or any failure to do so;

6.25.2.6 Any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by EOR pursuant to paragraph 14.10;

6.26 DELETION/OVERSIGHT/MISSTATEMENT:

6.26.1 Any deletion, oversight or misstatement of the Specifications shall not release the Bidder from the responsibility of completing the project within the agreed upon time frame.

6.26.2 The cost of incidental work described in these Contract Requirements, for which there are no specific Contract Items, shall be considered as part of the general cost of doing the work and shall be included in the prices for the various Contract Items. No additional payment will be made therefore.

6.27 EXCEPTIONS TO SPECIFICATIONS:

6.27.1 Any exceptions to the Specifications and/or drawings must be brought to the attention of the Purchasing Department in writing prior to the expiration of the Bid question period. Failure to list any exceptions with the Purchasing Department in writing prior to the end of the Bid question period means the Bidder is complying 100% with the Specifications. All materials may be inspected by the District upon delivery for compliance with the Specifications. Deviations from the specifications shall be cause for the bid to be rejected as non-responsive unless the deviation was approved prior to the submittal of bids.

6.27.2 Any deletion, oversight or misstatement of these Specifications shall not release the Bidder from full responsibility for unsatisfactory workmanship and /or materials, together with all appurtenances necessary for unrestricted operation, as determined by the District in its sole discretion.

6.28 SILENCE OF SPECIFICATIONS:

6.28.1 The apparent Silence of any Specification as to any details, or the omission from the specifications of a detailed description concerning any point shall be regarded as meaning that only the best commercial practices are to prevail and that materials of the first quality and correct type, size and design are to be used. All workmanship is to be of first quality.

6.28.1.1 Work not specified in the Specifications, but involved in carrying out their intent or in the complete and proper execution of the work, is required and shall be performed by the Contractor as though it were specifically delineated or described.

6.29 QUALITY

6.29.1 Items delivered as a result of award from this bid shall be free of defects. Any item(s) not meeting this specification shall be picked-up by the awarded Bidder for immediate replacement at no additional charge to the District.

6.30 TRANSPORTATION AND HANDLING:

6.30.1 Transport and handle Products in accordance with manufacturer's instructions.

6.30.2 Promptly inspect shipments to ensure that Products comply with requirements, quantities are correct, and Products are undamaged.

6.30.3 Provide equipment and personnel to handle Products by methods to prevent soiling, disfigurement, or damage.



6.31 DISPOSAL:

6.31.1 Before the Contractor disposes of any existing improvements or equipment which is to be removed as a portion of the work, and for which disposition is not specifically provided for elsewhere in these Specifications, he shall contact the DISTRICT and determine if the removal items are to be salvaged. Items to be salvaged by the DISTRICT shall be neatly stockpiled or stored in a neat and acceptable manner at the construction site easily accessible to the DISTRICT. Equipment and materials which shall not be salvaged by the DISTRICT shall become the property of the Contractor to be removed from the site and disposed of in an acceptable manner.

6.32 OCCUPATIONAL HEALTH AND SAFETY:

6.32.1 The CONTRACTOR, as a result of award of the bid, delivering any toxic substances item as defined in Code of Federal Regulation Chapter 29, shall furnish to the Purchasing Department, a Material Safety Data Sheet (MSDS). The material safety data sheet shall be provided with initial shipment and shall be revised on a timely basis as appropriate. The MSDS must include the following information:

6.32.2 The chemical name and the common name of the toxic substance.

6.32.3 The hazards or other risks in the use of the toxic substance, including:

6.32.3.1 The potential for fire, explosion, corrosion and reactivity;

6.32.3.2 The known acute and chronic health effects of risks from exposure, including the medical conditions which are generally recognized as being aggravated by exposure to the toxic substance; and

6.32.3.3 The primary routes of entry and symptoms of overexposure.

6.32.4 The proper precautions, handling practices, necessary personal protective equipment, and other safety precautions in the use of or exposure to the toxic substances including appropriate emergency treatment in case of overexposure.

6.32.5 The emergency procedure for spills, fire, disposal and first aid.

6.32.6 A description in lay terms of the known specific potential health risks posed by the toxic substance intended to alert any person reading this information.

6.32.7 The year and month, if available, that the information was compiled and the name, address and emergency telephone number of the manufacturer responsible for preparing the information. Any questions regarding this requirement should be directed to: Department of Labor and Employment Security, Bureau of Industrial Safety and Health, Toxic Waste Information Center, 2551 Executive Center Circle West, Tallahassee, FL 32301-5014, Telephone 1800-367-4378.

6.33 OSHA:

6.33.1 The CONTRACTOR warrants that the product/services supplied to the District shall conform in all respects to the standards set forth in the Occupational Safety and Health Act 1970, as amended, and the failure to comply with this condition shall be considered as a breach of contract.

6.34 CONDITIONS AND PACKAGING:

Related Article: 6.4 Labor, Materials And Equipment: Conditions, Substitutions

6.34.1 It is understood and agreed that any item offered or shipped as a result of this bid shall be new (current production model at the time of the bid). All containers shall be suitable for storage or shipment, and all prices shall include standard commercial packaging.

6.35 UNDERWRITERS' LABORATORIES:

6.35.1 Unless otherwise stipulated in the bid, all manufactured items and fabricated assemblies shall be UL listed or re-examination testing where such has been established by UL for the items offered and furnished.

6.36 ASBESTOS:

6.36.1 Contractor shall not use any asbestos or asbestos-based fiber materials in the Work performed under this Contract.

6.36.2 If the CONTRACTOR during the course of the WORK observes the existence of asbestos in any structure, building or facility, the CONTRACTOR shall promptly notify the DISTRICT and the EOR. The DISTRICT shall consult with the EOR regarding removal or encapsulation of the asbestos material and the CONTRACTOR shall not perform any WORK pertinent to the asbestos material prior to receipt of special instructions from the DISTRICT through the EOR.

6.37 CLOSEOUT SUBMITTALS:

PART 1 GENERAL

6.37.1 SCOPE OF WORK

- 6.37.1.1 Closeout procedures.
- 6.37.1.2 Final cleaning.
- 6.37.1.3 Adjusting.
- 6.37.1.4 Project record documents.
- 6.37.1.5 As-built survey.
- 6.37.1.6 Operation and maintenance data.
- 6.37.1.7 Spare parts and maintenance Products.
- 6.37.1.8 Warranties and bonds.
- 6.37.1.9 Maintenance service.

6.37.2 RELATED SECTIONS

- Payment Procedures.
- Submittal Procedures.
- Commissioning.
- Testing, Adjusting and Balancing of HVAC.
- Commissioning of HVAC.

6.37.3 CLOSEOUT PROCEDURES

6.37.3.1 Submit written certification that contract documents were reviewed, work inspected, and that work is complete in accordance with contract documents and ready for DISTRICT'S Project Manager and EOR'S review.

6.37.3.2 Provide submittals to EORT and DISTRICT'S Project Manager that are required by governing or other authorities.

Submit final application for payment identifying total adjusted contract sum, previous payments, and sum remaining due.

DISTRICT may opt to occupy or portions of completed facilities upon substantial completion of those portions of work.

Contractor/CM shall provide punch list to EOR identifying items remaining to be completed.

EOR shall inspect project to determine completion of punch list and project compliance with Contract Documents.



6.37.4 FINAL CLEANING

6.37.4.1 Execute final cleaning prior to final project assessment.

6.37.4.2 Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, wax, clean and polish transparent and glossy surfaces, vacuum carpet and soft surfaces.

6.37.4.3 Clean equipment and fixtures to sanitary condition with cleaning materials per manufacturer's written recommendations.

6.37.4.4 Replace filters of operating equipment.

6.37.4.5 Clean debris from roofs, gutters, downspouts, and drainage systems.

6.37.4.6 Clean site; sweep paved areas, rake clean landscaped surfaces.

6.37.4.7 Remove waste and surplus materials, rubbish, and construction facilities from the site.

6.37.4.8 Clean and sanitize water fountains (coolers).

6.37.4.9 Clean ledges countertops and shelves with all-purpose non-abrasive cleaner leaving no residue.

6.37.5 ADJUSTING

6.37.5.1 Adjust operating products and equipment to ensure smooth and unhindered operation.

6.37.6 PROJECT RECORD DOCUMENTS

6.37.6.1 Maintain on site one set of record documents, recording accurate field revisions to contract documents to include:

- Drawings/specifications and addenda.
- Change orders and other modifications to work.
- Reviewed shop drawings, product data, and samples.
- Manufacturer's instruction for assembly, installation, and adjusting.

6.37.6.2 Ensure entries are complete and accurate, enabling ready access and reference by DISTRICT's Project Manager.

6.37.6.3 Store record documents separate from documents used for construction.

6.37.6.4 Record information concurrent with construction progress.

6.37.6.5 Specifications shall be legibly marked and recorded for each product used indicating the following:

- Manufacturer's name, product model and number.
- Product substitutions or alternates utilized.
- Changes made by addenda and modifications.

6.37.6.6 Record drawings and shop drawings shall be legibly marked with each item recorded to indicate actual construction as follows"

1. Measured depths of foundations in relation to finish first floor datum.
2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the work.
4. Field changes of dimension and details.

5. Details not on original contract drawings.

6.37.6.7 As-built survey: Upon completion of site construction improvements, provide EOR and DISTRICT's Project Manager with complete and accurate field survey prepared, signed and sealed by Florida registered surveyor.

6.37.6.8 Provide exact horizontal and vertical location relative to property lines and NGVD of buildings, concrete and asphalt surfaces and all drainage features including lakes, detention areas, berms, embankments, swales drainage inlets, storm-water outfalls, storm and sewer manholes and water shut off valve locations.

6.37.6.9 Provide actual grades of spot elevations shown on paving and drainage plans.

6.37.6.10 Provide sufficient information indicating a true representation of constructed grade conditions for areas where grading between two elevation points is not constructed at uniform slope.

6.37.6.11 Survey shall include cross sections elevations at 50' stations of swales, lakes, and drainage retention areas including banks, berms, bottoms and transitions constructed or improved.

Elevations shown shall be accurate to the nearest tenth of a foot.

6.37.6.12 Upon project completion, transfer project record drawing information and recording of building and site survey information to Autocad (2008 or later format) files and provide two copies of CD's to EOR for review and transmitted to DISTRICT, prior to claim for final Application for Payment.

Contractor/CM shall also submit hard copies of record drawings and project manual maintained during project to DISTRICT's Project Manager.

DISTRICT will be responsible for making prints from CD's and for their distribution to DISTRICT's user groups.

6.37.6.13 Submit one additional CD in Autocad to DISTRICT for distribution to Sheriff's Department with following information:

Provide Site Plan on black background indicating the following site information and in colors and layers indicated.

- | | |
|---|---------|
| a. Roads and Driveways into and on site | White |
| b. Backflow and PIV Valves | Cyan |
| c. Valves for Fire Lines | Magenta |
| d. Fire Hydrants | White |
| e. Emergency Generator | Cyan |
| f. Flammable Storage Buildings | Red |
| g. Gas Tanks | Red |

Provide separate drawing files for each floor plan along with mechanical mezzanines and roof access locations showing following systems and in colors and layers indicated.

- | | |
|---|---------|
| a. Intercom Panel | Yellow |
| b. Fire Alarm Panel | Red |
| c. Electrical Panels | Magenta |
| d. HVAC Control Panels | White |
| e. Roof Access Panels | Cyan |
| f. Flammable Storage Spaces | Red |
| g. Custodial Storage | Orange |
| h. Walls, windows, room names and numbers | Gray |

6.37.7 OPERATION AND MAINTENANCE DATA



6.37.7.1 Submit documentation as noted in individual product specifications and as noted herein.

6.37.8 SPARE PARTS AND MAINTENANCE PRODUCTS

6.37.8.1 Provide spare parts, maintenance, and extra products in quantities specified in specification.

6.37.8.2 Deliver to DISTRICT; obtain receipt prior to final payment.

6.37.9 WARRANTIES

6.37.9.1 Submit documentation as noted in individual product specifications and as noted herein.

6.37.9.2 Provide duplicate notarized copies.

6.37.9.3 Execute and assemble transferable warranty documents from subcontractors, suppliers, and manufacturers.

6.37.9.4 Provide Table of Contents and assemble in D-side 3-ring white binders with typed title sheet of contents inside durable plastic front cover.

6.37.9.5 Submit prior to final application for payment.

6.37.9.6 For items of work delayed beyond date of substantial completion, provide updated submittal within ten days after acceptance, listing date of acceptance as start of warranty period.

6.37.10 MAINTENANCE SERVICE

6.37.10.1 Furnish service and maintenance of components indicated in specification sections for one-year from date of substantial completion.

6.37.10.2 Examine, clean, adjust, and lubricate system components as required for reliable operation.

6.37.10.3 Include systematic examination, adjustment, and lubrication of components repairing or replacing parts as required with parts produced by the manufacturer of the original component.

6.37.10.4 DISTRICT shall approve in writing of transfers or reassignments of maintenance service tasks.

6.37.11 ASBESTOS CERTIFICATION

6.37.11.1 Provide notarized letter from Contractor/CM certifying that "to the best of his/her knowledge no asbestos containing building materials were used as a building material in the project", per FS 255.40.

6.37.12 PRODUCTS

6.37.12.1 APPROVED PRODUCTS Use only cleaning and maintenance products approved for use in Florida Educational Facilities.

6.38 TEMPORARY BARRIERS AND ENCLOSURES

6.38.1 GENERAL

Related Articles:

6.2- Contractor Risk and Work Protection

6.10-Safety, Protection, Storage and emergencies

6.21 Protection of Existing Property Improvements

6.38-Temporary barriers and Enclosures

6.39-Security

6.38.1.1 SCOPE OF WORK

6.38.1.2 Temporary barriers and enclosures to provide construction work areas separate from Owner's on-going school operations.

6.38.1.3 Protection of new work, existing facilities and grounds from damage, theft, vandalism, and unauthorized entry.

6.38.1.4 Six (6) foot high chain link fencing surrounding and separating areas under construction including area for contractor's mobilization and parking separate from existing school facilities and on-going school activities.

6.38.1.5 Demising walls and other barriers as required to separate building areas under construction that permits safe and unobstructed exiting of partially Owner occupied buildings.

6.38.1.6 Safety of construction workers and students, faculty and visitors located in areas of school facilities not under renovation or construction.

6.38.1.7 Control dust, erosion and sediment, noise, pollution, rodent and environmental control.

6.38.2 RELATED DOCUMENTS

Project Management and Coordination.

Security Procedures.

Submittal Procedures.

6.38.3 ENTRY CONTROL

6.38.3.3 Restrict entrance of persons and vehicles into Project site and existing facilities in accord with Section 01 35 33 – Security Procedures.

6.38.3.4 Prior to project commencement, Contractor's on-site personnel shall meet with Owner's Project Manager and School staff for renovation and new construction to delineate areas for Contractor's operations to include storage and office trailers, parking, material storage lay-down areas.

6.38.3.5 Material deliveries shall be coordinated with school staff to ensure safe transit of students and staff across delivery routes.

6.38.3.6 Interruption of preapproved entry controls shall be coordinated with Owner's Project Manager and School staff prior to proposed interruption.

6.38.3.7 Allow entrance only to authorized persons with proper identification.

6.38.3.8 Contractor/CM shall post "No Trespassing" and "Hard Hat Area" signs along project perimeter and at construction access points.

1. No Trespassing sign shall include statutory language that area is construction site and that trespassing and theft are felonies and violators will be prosecuted.

2. No Trespassing sign shall include name of Contractor/CM.

3. No Trespassing signs shall not be larger than 24"(600mm) by 24"(600mm).

4. Hard Hat Area sign shall not be larger than 12"(300mm) by 12"(300mm).

6.38.4 DEMISING WALLS

6.38.4.1 Where location of construction is contiguous to or within existing school, Provide demising walls to physically separate new or renovation work from existing on-going school operations.



6.38.4.2 Demising walls shall be continuous plywood with vapor barrier and wood framing to prevent unauthorized entrance, dust or debris from entering occupied portion of school.

6.38.4.3 Where construction is overhead, provide safe and secure method of access through or adjacent to work with system of scaffolding, plywood or wood planking overhead to prevent falling debris or materials from interrupting safe passage through construction area.

6.38.5 FENCING

6.38.5.1 Areas under construction including area for contractor's mobilization and parking shall be separated from existing school facilities and on-going school activities with fencing.

6.38.5.2 Provide 6' high chain link fencing along construction zone boundaries not facing existing buildings.

6.38.5.3 Provide with 6' high chain link fencing with visual fabric covering along construction zone boundaries greater than 20' of existing buildings not in construction zone.

6.38.5.4 Provide with 6' high chain link fencing with plywood covering along construction zone boundaries greater less than 20' of existing buildings not in construction zone.

6.38.5.5 Fencing shall be designed to resist winds up to 74 miles per hour.

6.38.5.6 Contractor (CM) shall have option of providing fencing designed to withstand 140 miles per hour or be completely removed 24 hours prior to occurrence of anticipated high wind event.

6.38.5.7 Provide access gates required by code for ingress and egress and for Owner's and Contractor/CM's access to Owner's access to occupied portion of site and for construction access.

6.38.6 ENVIRONMENTAL CONTROLS

6.38.6.1 Protect existing buildings and adjacent property from dust produced by construction operations. Use encapsulating or wetting devices to control moisture content of traffic and construction areas.

6.38.6.2 Control surface drainage to prevent off site discharge of pollutants and prevent erosion and sedimentation.

6.38.6.3 Provide berms, dikes or drains to divert water flow away from new or existing structures into storm water retention areas.

6.38.6.4 Provide methods necessary to prevent mud and debris from entering storm water system.

6.38.6.5 Provide methods necessary to prevent excessive noise on site.

1. Comply with OSHA and Owner's noise requirements.

2. Coordinate with Owner's Construction Manager for construction activities to limit or cease construction activities creating any noise associated with construction on active school sites when FCAT testing occurs for one week in March of each year.

6.38.6.6 Provide methods necessary to prevent pests and insects from damaging the work.

6.38.6.7 Provide methods necessary to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances or pollutants from construction operations.

6.38.7 SUBMITTALS

6.38.7.1 Comply with Section "Submittal Procedures."

6.38.7.2 Submit site plan and floor plans indicating locations and material construction of proposed protective structures.

6.38.8 TEMPORARY FENCING

6.38.8.1 Six (6) foot high, minimum 10 gage aluminum or galvanized steel fabric.

6.38.8.2 Fencing shall have six foot high visual fabric cover to block visual access to construction activities.

6.38.8.3 5/8" C/D plywood sheets, pressure treated or other means of weather protection, with 2 x 4 wood framing at edges and 24" maximum vertical spacing.

6.38.9 TEMPORARY WALLS

6.38.9.1 Demising Wall: 5/8" C/D plywood sheets, 2 x 4 wood framing at 24" maximum spacing, and 10 mil black polyethylene vapor barrier covering with sealed joints.

6.38.9.2 Overhead Protection: Metal scaffolding with 3/4" B/C plywood or 2" x 12" wood planking.

6.38.10 EXECUTION/ 1 INSTALLATION AND REMOVAL

6.38.10.1 Temporary fencing shall be installed prior to start of vertical construction and removed upon completion of work.

6.38.10.2 Demising walls shall be installed prior to start of renovations or building additions and removed work

6.38.10.3 Walls shall be protected or removed during storm events where winds are anticipated to exceed 74 miles per hour.

6.39 SECURITY PROCEDURES

6.39.1 SCOPE OF WORK

6.39.1.1 Development of site security program, project entry control procedures, personnel screening and identification in compliance with Florida Statute FS1012.465 – Jessica Lunsford Act for vendors, and Contractor/CM's.

6.39.1.2 RELATED SECTIONS

- Project Management and Coordination.
- Submittal Procedures.
- Temporary Barriers and Enclosures.

6.39.1.3 JESSICA LUNS福德 ACT

1. Contractor/CM, his subcontractors, vendors and suppliers who are to be permitted access to school grounds while students are present, or have direct contact with students or have access to or control of school funds shall obtain Level 2 background screening in accord with Florida Statute FS1012.465 – Jessica Lunsford Act.

2. Level 2 screening excludes personnel working on school district property where students are present who have criminal records that include sexual offender, sexual misconduct with developmentally disabled or mental health patients, terrorism, murder, kidnapping, lewd, lascivious or indecent acts or exposure, incest, child abuse or neglect.

3. Persons screened as noted above with other types of criminal history may be allowed on school grounds provided under following conditions:

4. Contractor/CM, subcontractors, vendors and suppliers shall be under continuous direct supervision of school district employee or Level 2 screened and cleared employee as noted above.

5. Contractor/CM, subcontractors, vendors and suppliers may be allowed on a student occupied site if area of construction is isolated from students by continuous six foot high chain link fence separating work area and school.



6. Persons with current Level 2 clearance who are subsequently arrested for disqualifying offenses shall be disqualified from access to school sites and shall immediately surrender their Photo ID Badge to their employer who shall be responsible for returning badge to Martin County School District's Department of Human Resources with 48 hours of arrest or notice of arrest or criminal offense.

7. Persons failing to notify their employer and Martin County School District's Department of Human Resources with 48 hours of arrest will be charged with 3rd degree felony, punishable by up to five years imprisonment and \$1,000 fine.

8. Employers of persons having been arrested for disqualifying offenses who subsequently allows said employee to continue working on school property may also be charged with 3rd degree felony, punishable by up to five years imprisonment and \$1,000 fine.

9. Contractor/CM, his subcontractors, vendors and suppliers working on school board sites shall be fingerprinted and obtain work badges.

10. Contractor/CM, his subcontractors, vendors and suppliers have worked and obtained in other school districts must be screened to obtain new badges.

11. Questions regarding fingerprinting or identification badge processing may be directed to District Personnel Department at (772)219-1200, Ext. 30296.

12. Fingerprinting services are provided by private vendor through Florida Dept. of Education. DOE sponsored website will direct individuals to nearest fingerprinting location.

Cost of fingerprinting is \$81.25 per person and shall be prepaid either by money order to Fingerprinting Services, LLC or by credit card payment via Internet. Website is <http://www.flprints.com>. For information, telephone (877)357-7456.

13. After fingerprinting and criminal background check is complete, individuals shall make appointment for photo ID's by making appointments at Martin County School District Personnel Department located in Building 20 at School District Administration Center, 500 E. Ocean Blvd., Stuart, FL 34994.

Appointments for ID photo badges shall be made after completion of fingerprinting with Martin County School District Personnel Department by phone at (772) 219-1200, Ext. 30296

Cost of Photo ID's is \$6.00. Payment may be made with company check, money order or personal check.

6.39.2 SECURITY PROGRAM

6.39.2.1 Protect new work, existing facilities and grounds from damage, theft, vandalism, and unauthorized entry.

6.39.2.2 Initiate security program in coordination with Owner's existing security system at time of project mobilization to ensure safety of students, faculty and visitors to the unaffected portions of the school facilities.

6.39.2.3 No student contact is permitted between the Contractor's personnel and students. Any breach of this requirement will result in the immediate removal of the personnel from the job site upon direction by the Owner.

6.39.2.4 Smoking is not allowed on School Board property. Any breach of this restriction will result in immediate removal of personnel from the site upon direction by Owner's Project Manager.

6.39.2.5 Maintain security program throughout construction period until Owner's project acceptance.

6.39.3 ENTRY CONTROL

6.39.3.1 Restrict entrance of persons and vehicles into Project site and existing facilities as indicated by Owner approved security plan.

6.39.3.2 Allow entrance only to authorized persons with proper identification.

Maintain log of workers and visitors, make available to Owner on request.

Coordinate access of Owner's personnel to site in coordination with Owner's security forces.

6.39.4 PERSONNEL IDENTIFICATION

6.39.4.1 Contractor/CM on-site staff, subcontractors and vendors on site shall wear identification badges at all times on site.

6.39.4.2 Identification badges shall be current at time of project and shall be reverified and reissued yearly if project extends past original badge expiration date.

6.39.5 SUBMITTALS

6.39.5.1 Comply with Section Submittal Procedures.

6.39.5.2 Provide list of personnel proposed to be used on project for fingerprinting and background checks (only required for existing school projects).

6.39.5.3 Contractor/CM shall submit initial list of accredited persons and provide monthly updated lists to Owner.

6.39.5.4 Provide security plan to Owner indicating how construction site is to be secured and separated from existing school and its operations including normal and emergency egress and exiting from the operational portion of school and for new additions and existing portion under construction.

6.40 PRODUCT SUBSTITUTION REQUIREMENTS AND PROCEDURES

6.40.1 SCOPE OF WORK

6.40.1.1 Administrative and procedural requirements for consideration of request for substitution during the design and construction phases.

6.40.2 REFERENCES

Submittal Procedures.

References.

Quality Control.

Closeout Submittals.

6.40.3 REQUIREMENTS

6.40.3.1 Whenever a material, article or piece of equipment is identified on the Drawings or Specifications by reference to brand name or catalogue number, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements, and that other products of equal capacities, quality and function may be considered. The CONTRACTOR may request the substitution of a material, article, or piece of equipment of equal substance and function for those referred to in the Contract Documents by reference to brand name or catalogue number, and if, in the opinion of the EOR and DISTRICT, such material, article, or piece of equipment is of equal substance and function to that specified, the EOR with concurrence of the DISTRICT'S PROJECT MANAGER may approve its substitution and use by the CONTRACTOR

6.40.3.2 A request constitutes a representation that the Contractor or Bidder:

6.40.3.2.1 Has investigated proposed Product and determined that it meets or exceeds the quality level of the specified Product.



6.40.3.2.2 Will provide the same warranty for the Substitution as for the specified Product.

6.40.3.2.3 Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to Owner.

6.40.3.2.4 Waives claims for additional costs or time extension which may subsequently become apparent.

6.40.3.2.5 Will reimburse Owner and Consultant for review or redesign services associated with substitution.

6.40.3.3 The application shall state that the evaluation and acceptance of the proposed substitute shall not prejudice CONTRACTOR'S achievement of Substantial Completion on time, whether or not acceptance of the substitute for use in the WORK shall require a change in any of the Contract Documents (or in the provisions of any other direct contract with the DISTRICT for WORK on the Project) to adapt the design to the proposed substitute and whether or not incorporation or use of the substitute in connection with the WORK is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified shall be identified in the application and available maintenance, repair and replacement service shall be indicated.

6.40.3.4 The application shall also contain an itemized estimate of all costs and cost savings that shall result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which shall be considered by EOR in evaluating the proposed substitute. EOR may require CONTRACTOR to furnish at CONTRACTOR'S expense additional data about the proposed substitute.

6.40.3.5 Incidental changes or extra component parts required to accommodate the substitute shall be made by the CONTRACTOR without an increase in the Contract Price or Contract Time. The CONTRACTOR shall reimburse the DISTRICT for charges of the EOR and EOR'S consultants for review evaluating each proposed substitution. These costs shall include transportation to operating installation at factories, etc.

6.40.3.6 No substitute shall be ordered or installed without the written approval of the EOR with the DISTRICT'S PROJECT MANAGER's concurrence. The District may require the CONTRACTOR to furnish at CONTRACTOR'S expense a special performance guarantee or other surety with respect to any substitute.

6.40.3.7 Delay caused by obtaining approvals for substitute materials or installations shall not be considered justifiable grounds for an extension of construction time.

6.40.4 SUBMITTAL PROCEDURES

6.40.4.1 Transmit three (3) copies of each substitution request on company letterhead with completed Product Substitution Request Form in the Sample Forms Section of the Document.

6.40.4.2 During bidding phase, substitution requests shall be directed to the DISTRICT.

6.40.4.3 During construction phase substitution requests shall be directed to the District.

6.40.4.4 Substitution Form shall identify project, Contractor/CM and EOR during bidding phase plus Subcontractor or supplier during construction phase indicating Specification Section and Paragraph number of specified material and pertinent drawing and detail numbers, as appropriate.

Include complete information as required in the Substitution Form. Incomplete information will result in automatic rejection of the substitution request.

6.40.4.5 Apply contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction work, and coordination of information are in accordance with the requirements of the work and contract documents.

6.40.4.6 Schedule submittals to expedite the project, and deliver to EOR or Contractor/CM at business address. Coordinate submission of related items.

6.40.4.7 For each submittal for review, allow five(5) work days excluding delivery time to and from the EOR or CM/Contractor.

6.40.4.8 Identify variations from contract documents and product or system limitations, which may be detrimental to successful performance of the completed work.

6.40.4.9 Provide space for Contractor/CM and EOR review stamps.

6.40.4.10 When revised for resubmission, identify all changes made since previous submission.

6.40.4.11 Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.

6.40.4.12 Submittals not requested will not be recognized or processed.

6.40.4.13 Submit shop drawings, product data, and certified test results attesting to the proposed Product equivalence. Burden of proof is on proposer.

6.40.4.14 The Consultant will notify Contractor in writing of decision to accept or reject request.

6.40.5 SUBSTITUTION REQUESTS

Requests for substitutions shall be made not later than ten (10) calendar days prior to bid date. Requests received after the above dates may not be considered.

6.41 FIELD SAMPLES AND MOCKUPS

6.41.1 SCOPE OF WORK

Administrative and procedural requirements for assure quality of construction before and during construction.

General requirements for mockups and field samples, constructed, applied or assembled at the site for reviewed for use as a quality standard.

6.41.2 RELATED SECTIONS

6.11: Shop Drawings and Samples

Payment Procedures

Submittal Procedures.

References.

Quality Control.

Project Storage and Handling Requirements.

Closeout Submittals.

6.41.3 COORDINATION AND PROJECT CONDITIONS

6.41.3.1 Coordinate scheduling, submittals, and work to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.

6.41.3.2 Verify utility requirements and characteristics of operating equipment are compatible with building utilities.

6.41.3.3 Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.



6.41.3.4 Coordinate space requirements, supports and installation of mechanical and electrical work that is indicated diagrammatically on Drawings.

6.41.3.5 Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with line of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.

6.41.3.6 In finished areas, except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.

6.41.3.7 Coordinate completion and clean up of Work of separate sections in preparation for Substantial Completion and for portions of Work designated for DISTRICT's partial occupancy.

6.41.3.8 After DISTRICT occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of DISTRICT's activities.

6.41.3.9 DISTRICT change orders for extra work required by Contractor/CM due to poor coordination with sub trades will not be considered.

6.41.4 FIELD ENGINEERING

Employ Land Surveyor registered in State of Florida approved by DISTRICT from DISTRICT's continuing services providers. Obtain list from DISTRICT's Project Manager.

6.41.4.1 Contractor shall locate and protect survey control and reference points.

6.41.4.2 Control datum for survey is that established by DISTRICT provided survey.

6.41.1.3 Verify setbacks and easements; confirm drawing dimensions and elevations.

6.41.4.4 Provide field engineering services. Establish elevations, lines, and levels, utilizing recognized engineering survey practices.

6.41.4.5 Submit copy of site drawing and certificate signed by the Land Surveyor that the elevations and locations of the Work are in conformance with the Contract Documents.

6.41.5 MOCKUP REQUIREMENTS

6.41.5.1 Tests will be performed under provisions identified in this section and identified in respective product specification sections.

6.41.5.2 Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.

6.41.5.3 Accepted mock-ups shall be comparison standard for remaining Work.

6.41.5.4 Where mock-up has been accepted by Architect/Engineer and is specified in product specification sections to be removed; remove mock-up and clear area when directed to do so by Architect/Engineer.

ARTICLE 7 – OTHER WORK

7.1. RELATED WORK AT SITE:

7.1.1 The DISTRICT may perform other WORK related to the Project at the site by the DISTRICT'S own forces, let other direct contracts therefor which shall contain General Conditions similar to these. If the fact that such other WORK is to be performed was not noted in the Contract Documents, written notice thereof shall be given to CONTRACTOR prior to starting Section IV

any such other WORK; and, if CONTRACTOR believes that such performance shall involve additional time and the parties are unable to agree as to the extent thereof, CONTRACTOR may make a claim therefor as provided in Articles 11 (Change in Contract Price) and Article 12 (Change in Contract Time). If the performance of additional WORK by other Contractor or the DISTRICT is noted in the Contract Documents, no additional adjustment of time or compensation shall be considered.

7.1.2 CONTRACTOR shall afford the DISTRICT and other contractors who are a party to such a direct contract (or the DISTRICT, if the DISTRICT is performing the additional WORK with the DISTRICT'S employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such WORK, and shall properly connect

7.1.2 CONTRACTOR shall afford the DISTRICT and other contractors who are a party to such a direct contract (or the DISTRICT, if the DISTRICT is performing the additional WORK with the DISTRICT'S employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such WORK, and shall properly connect and coordinate the WORK with theirs. CONTRACTOR shall do all cutting, fitting and patching of the WORK that may be required to make its several parts come together properly and integrate with such other WORK. CONTRACTOR shall not endanger any WORK of others by cutting, excavating or otherwise altering their WORK and shall only cut or alter their WORK with the written consent of the DISTRICT, EOR, and others whose WORK shall be affected. The duties and responsibilities of CONTRACTOR under this paragraph are for the benefit of the DISTRICT and other contractors to the extent that there are comparable provisions for the benefit of CONTRACTOR in said direct contracts between the DISTRICT and other contractors.

7.1.3 If any part of CONTRACTOR'S WORK depends for proper execution or results upon the WORK of any such other contractor other than CONTRACTOR'S OWN SUBCONTRACTOR, (or the DISTRICT), CONTRACTOR shall inspect and promptly report to CONSULTANT in writing any delays, defects or deficiencies in such other WORK that render it unavailable or unsuitable for such proper execution and results of CONTRACTOR'S WORK. CONTRACTOR'S failure to report shall constitute an acceptance of the other WORK as fit and proper for integration with CONTRACTOR'S WORK except for latent defects and deficiencies in the other WORK.

7.2. COORDINATION:

7.2.1. If the DISTRICT contracts with others for the performance of other WORK on the Project at the site, the person or organization who shall have authority and responsibility for coordination of the activities among the various prime contractors shall be identified in the Technical Specifications and the specific matters to be covered by such authority and responsibility shall be itemized, and the extent of such authority and responsibilities shall be provided in the Technical Specifications. Unless otherwise provided in the Technical Specifications, neither the DISTRICT nor the EOR shall have any authority or responsibility in respect of such coordination.

ARTICLE 8 – DISTRICT'S RESPONSIBILITIES

8.1 COMMUNICATIONS TO CONTRACTOR:

8.1.1 DISTRICT shall issue all communications to CONTRACTOR, copy to EOR.

8.2 FURNISH DATA:

8.2.1 DISTRICT shall promptly furnish the data required of the DISTRICT under the Contract Documents.



8.3. PAYMENTS:

8.3.1 DISTRICT shall make payments to CONTRACTOR promptly when they are due as provided in Sections 14.5 (Review of Application for Progress payment), and 14.10, (Final Payment and Acceptance).

8.4 LANDS, EASEMENTS: REPORTS AND TESTS:

8.4.1 The DISTRICT'S duties in respect of providing lands and easements and providing engineering surveys, if available, to establish reference points are set forth in paragraphs 4.1.1(Availability of Land) and 4.5.1 (Reference Points).

8.4.2 The DISTRICT shall identify and make available to CONTRACTOR copies of reports of physical conditions at the Site and drawings of existing structures that have been utilized in preparing the Contract Documents as set forth in Paragraph 4.2, (Report of Physical Conditions).

8.5 CHANGE ORDERS

8.5.1 The DISTRICT is obligated to execute Change Orders as indicated in Article 10, (Changes in the Work).

8.6 SUSPENSION OF WORK

8.6.1 In connection with the DISTRICT'S right to stop WORK or suspend WORK see paragraph 13.5 (District May Stop Work) and 15.1 District May Suspend Work). Paragraph 15.2 (District May Terminate for Cause) and 15.3 (District May terminate Without Cause) deals with the DISTRICT'S right to terminate services of CONTRACTOR.

8.7 ESTIMATED DOLLAR VALUE:

8.7.1 No guarantee of the dollar amount of this bid is implied or given.

8.8 QUANTITIES:

8.8.1 Quantities shown are estimates only. No guarantee or warranty is given or implied by the District as to the total amount that may or may not be purchased from any resulting contract. The District reserves the right to decrease or increase quantities or add or delete any item from the contract if it is determined that it best serves the interests of the District. Orders shall be placed as needed by individual locations during the contract period. The CONTRACTOR agrees that the price(s) offered shall be maintained irrespective of the quantity actually purchased.

8.9 ADDITIONAL TERMS AND CONDITIONS:

8.9.1 No additional terms and conditions included with the Bid response shall be evaluated or considered, have any force or effect, and are inapplicable to this Bid. It is understood and agreed that the conditions in these Bid Documents are the only conditions applicable to this Bid and the CONTRACTOR'S authorized signature on the Bid Form attests to this.

ARTICLE 9 – CONSULTANT’S (EOR) STATUS DURING CONSTRUCTION

9.1 DISTRICT’S REPRESENTATIVE:

9.1.1 The EOR (if specifically designated), or a specifically designated employee of the DISTRICT, shall act as the DISTRICT’S REPRESENTATIVE during the construction period. The duties and responsibilities and the limitations of authority of the EOR as one of the DISTRICT’S REPRESENTATIVES during construction are set forth in Articles 1 through 17 of these Supplementary Conditions and shall not be extended without written consent of the DISTRICT’S PROJECT MANAGER and the EOR.

9.1.2 The EOR's decision with the consent of the DISTRICT'S PROJECT MANAGER in matters relating to aesthetics, shall be final, if within the terms of the Contract Section IV

Documents.

9.1.3 EOR shall work with the DISTRICT to

9.1.3.1 Establish on-site lines of authority and communications:

9.1.3.2 Schedule and conduct pre-construction meeting and progress meetings.

9.1.4 EOR shall also work with the DISTRICT to Establish procedures for:

9.1.4.1 Submittals

9.1.4.2 Reports and records

9.1.4.3 Recommendations

9.1.4.4 Coordination of drawings

9.1.4.5 Schedules

9.1.4.6 Resolution of conflicts

9.1.5 EOR shall also

9.1.5.1 Interpret Contract Specifications and Drawings

9.1.5.2 Transmit written interpretations to Contractor, and to other concerned parties.

9.1.5.3 Assist in Obtaining permits and approvals

9.1.5.4 Verify that Contractor and subcontractors have obtained inspections for Work and for temporary facilities.

9.1.5.5 Assist DISTRICT to control the use of Site:

9.2 VISITS TO SITE:

9.2.1 After written notice to proceed with the WORK, the EOR shall make visits to the site at intervals appropriate to the various stages of construction or as per EOR'S contract with DISTRICT to observe the progress and quality of the executed WORK and to determine, in general, if the WORK is proceeding in accordance with the Contract Documents. On the basis of his on-site observations, as an experienced and qualified design professional, he shall keep the DISTRICT informed of the progress of the WORK, shall endeavor to guard the DISTRICT against defects and deficiencies in the WORK of the Contractor.

9.3 PROJECT REPRESENTATION:

9.3.1 The Martin County School District or its authorized agents, inspectors or representatives acting within the scope of duties entrusted to them by the DISTRICT.

9.4 CLARIFICATIONS AND INTERPRETATIONS:

9.4.1 The EOR shall issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents (in the form of Drawings or otherwise) as the DISTRICT may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents. If CONTRACTOR believes that a written clarification of interpretation justifies an increase in the Contract Price or an extension of the Contract Time and the parties are unable to agree to the amount or extent thereof, CONTRACTOR may make a claim therefor as provided in Articles 11 (Change in Contract Price) and Article 12 (Change in Contract Time).

9.5 MEASUREMENTS:

9.5.1 MEASUREMENTS: All Work completed under the Contract shall be measured by the EOR'S or DISTRICT'S REPRESENTATIVE or PROJECT REPRESENTATIVE according to the United States Standard Measures. All linear surface measurements shall be made horizontally or vertically as required by the item measured.



9.6 REJECTING DEFECTIVE WORK

9.6.1 The EOR, DISTRICT'S REPRESENTATIVE or PROJECT REPRESENTATIVE shall have authority to disapprove or reject Work which is "defective" (which term is hereinafter used to describe Work that is unsatisfactory, faulty or defective, or does not conform to the requirements of 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 final acceptance). They shall also have authority to require special inspection or testing of the Work as they may individually or severally deem necessary, whether or not the Work is fabricated, installed or completed.

9.6.2 Mockups must be approved prior to work beginning. The mockup shall be the basis for the quality of work and the work's acceptance.

9.7 SHOP DRAWINGS, CHANGE ORDERS AND PAYMENTS:

9.7.1 In connection with EOR'S responsibility for Shop Drawings and samples, see Sections 6.11 (Shop Drawings and Samples).

9.7.2 In connection with EOR'S responsibilities as to Change Orders see Article 10, (Changes in the Work), Articles 11 (Change in Contract Price) and Article 12 (Change in Contract Time).

9.7.3 In connection with EOR'S responsibilities in respect of Applications for Payment, etc., see Article 14, (Payments to Contractor and Completion).

9.8 DETERMINATIONS FOR UNIT PRICES:

9.8.1 The DISTRICT PROJECT MANAGER and EOR shall determine the actual quantities and classifications of Unit Price WORK performed by CONTRACTOR. The DISTRICT PROJECT MANAGER and EOR shall review with CONTRACTOR EOR'S preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). The DISTRICT PROJECT MANAGER'S written decisions thereon shall be final and binding upon the DISTRICT and CONTRACTOR unless, within ten days after the date of any such decision, the CONTRACTOR delivers to the DISTRICT and to EOR written notice of intention to appeal from such a decision.

9.9 DECISIONS ON DISPUTES:

9.9.1 The DISTRICT PROJECT MANAGER with the input of the CONSULTANT shall be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the WORK thereunder. Claims, disputes and other matters relating to the acceptability of the WORK or the interpretation of the requirements of the Contract Documents pertaining to the performance and furnishing of the WORK and claims under Articles 11 (Change in Contract Price) and Article 12 (Change in Contract Time) in respect of changes in the Contract Price or Contract Time shall be referred initially to EOR in writing with a request for a formal decision in accordance with this paragraph, which EOR with the consent of the District Project Director shall render in writing within a reasonable time. Written notice of each such claim, dispute and other matter shall be delivered by the claimant to The DISTRICT PROJECT MANAGER and EOR and the other party to the Contract promptly (but in no event later than ten (10) days) after the start of the occurrence or event giving rise thereto, and written supporting data shall be submitted to The DISTRICT PROJECT MANAGER and EOR within ten (10) days after such occurrence unless CONSULTANT with the consent of the District Project Director allows an additional period of time to ascertain more accurate data in support of such claim, dispute or other matter.

9.9.2 The DISTRICT PROJECT MANAGER and EOR shall submit any response to the claimant within ten (10) days after receipt of the claimant's last submittal (unless The DISTRICT PROJECT MANAGER and EOR allows additional time). EOR with the consent of the District Project Director shall render a formal decision in writing thirty days after receipt of the opposing party's submittal, if any, in accordance with this paragraph. The DISTRICT PROJECT MANAGER'S written decision, on such claim, dispute or other matter shall be final and binding upon CONTRACTOR unless:

(i) an appeal from DISTRICT/ EOR's decision is taken within the time limits and in accordance with the procedures set forth pursuant to Article 16, (Dispute Resolution) or

(ii) a written notice of intention to appeal from The DISTRICT PROJECT MANAGER and EOR's written decision is delivered by CONTRACTOR to the DISTRICT PROJECT MANAGER and EOR within ten (10) days after the date of such decision and a formal proceeding is instituted by the appealing party in a forum of competent jurisdiction to exercise such rights or remedies as the appealing party may have with respect to such claim, dispute or other matter in accordance with applicable Laws and Regulations within thirty (30) days of the date of such decision, unless otherwise agreed in writing by DISTRICT and CONTRACTOR.

9.9.3 The rendering of a decision by The DISTRICT PROJECT MANAGER pursuant to paragraphs 9.8.1, (Determinations for Unit Prices), 9.9.1 and 9.9.2 (Dispute Resolution) with respect to any such claim, dispute or other matter (except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.11 Waiver of Claims) shall be a condition precedent to any exercise by CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any such claim, dispute or other matter pursuant to Article 16.

9.10 INSPECTION AND TESTING:

9.10.1 EOR shall inspect work to assure performance in accord with requirements of Contract Documents as follows:

9.10.1.1 Administer special testing and inspections of suspect Work.

9.10.1.2 Reject Work, which does not comply with requirements of Contract Documents.

9.10.2 Coordinate Testing Laboratory Services:

9.10.2.1 Verify that required laboratory personnel are present.

9.10.2.2 Verify that tests are made in accordance with specified standards.

9.10.2.3 Review test reports for compliance with specified criteria.

9.10.2.4 Recommend and administer any required re-testing.

9.11 LIMITATIONS ON EOR:

9.11.1 Neither EOR'S authority to act under this Article 9 or elsewhere in the Contract Documents nor any decision made by EOR either to exercise or not exercise such authority shall give rise to any duty or responsibility of EOR to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization performing any of the WORK, or to any surety for any of them.

9.11.2 Whenever in the Contract Documents the term "as ordered", "as directed", "as required", "as allowed", "as approved" or terms of like effect or import are used, or the adjectives



"reasonable", "suitable", "acceptable", "proper", or "satisfactory" or adjectives of the like effect or import are used to describe a requirement, direction, review or judgment of EOR as to the WORK, it is intended that such requirement, direction, review or judgment shall be solely to evaluate the WORK for compliance with the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be effective to assign to EOR any duty or authority to supervise or direct the furnishing or performance of the WORK or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.11.3 or 9.11.4.

9.11.3 EOR shall not be responsible for CONTRACTOR'S means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, and EOR shall not be responsible to CONTRACTOR for CONTRACTOR'S failure to perform or furnish the WORK in accordance with the Contract Documents.

9.11.4 EOR shall not be responsible for the acts or omissions of CONTRACTOR or of any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the WORK.

ARTICLE 10 – CHANGES IN THE WORK

10.1 AUTHORIZED CHANGES IN THE WORK

10.1.1 Without invalidating the Contract and without notice to any surety, the DISTRICT may, at any time or from time to time, order additions, deletions or revisions in the WORK; these shall be authorized by a Written Amendment, a Change Order, or a Work Change Directive. Upon receipt of any such document, CONTRACTOR shall promptly proceed with the WORK involved that shall be performed under the applicable conditions of the Contract Documents, except as otherwise specifically provided.

10.1.2. If the DISTRICT and CONTRACTOR are unable to agree as to the extent, if any, of an increase or decrease in the Contract Price or an extension or shortening of the Contract Time that should be allowed as a result of a Work Change Directive, a claim may be made therefore as provided in Articles 11 (Change in Contract Price) and Article 12 (Change in Contract Time).

10.2 UNAUTHORIZED CHANGES IN THE WORK

10.2.1 CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Time with respect to any WORK performed that is not required by the Contract Documents as amended, modified and supplemented as provided in Section 3.2, (References to Standards) except in the case of an emergency as provided in paragraph 6.10.11 (Emergencies) and except in the case of uncovering WORK as provided in paragraph 13.4.2, (Uncovering Work).

10.3 EXECUTION OF CHANGE ORDERS

10.3.1 The DISTRICT and CONTRACTOR shall execute appropriate Change Orders (or Written Amendments) covering:

10.3.1.1 Changes in the WORK, which are ordered by the DISTRICT pursuant to paragraph 10.1.1, (Changes in the Work) are required because of acceptance of *defective* WORK under paragraph 13.8 or correcting *defective* WORK under paragraph 13.9, or are agreed to by the parties.

10.3.1.2 Changes in the Contract Price or Contract time which the parties agree to.

10.3.1.3 Changes in the Contract Price or Contract Time which embody the substance of any written decision rendered by EOR pursuant to paragraph 9.9.1; (Decisions on Disputes) provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provision of the Contract Documents and applicable Laws and Regulations, but during any such appeal,

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CONTRACTOR shall carry on the WORK and adhere to the progress schedule as provided in paragraph 6.24.1.

10.3.2. Surety. It is distinctly agreed and understood that any changes made in the Contract Documents for this WORK (whether such changes increase or decrease the amount thereof) or any change in the manner or time of payments or time of performance made by the DISTRICT to the CONTRACTOR shall in no way annul, release or affect the liability and surety on the Bonds given by the CONTRACTOR. If notice of any change affecting the general scope of the WORK or the provisions of the Contract Documents (including, but not limited to, Contract Price or contract Time) is required by the provisions of any bond to be given to a Surety, the giving of any such notice shall be CONTRACTOR'S responsibility, and the amount of each applicable Bond shall be adjusted accordingly.

10.3.3 Notwithstanding, anything to the contrary contained within the contract documents, all change orders involving additional cost or extensions of time, shall be governed by the ordinances of the DISTRICT.

ARTICLE 11 – CHANGE OF CONTRACT PRICE

11.1 GENERAL

11.1.1 The Contract Price constitutes the total compensation (subject to authorized adjustments) payable to CONTRACTOR for performing the WORK. All duties, responsibilities and obligations assigned to or undertaken by CONTRACTOR shall be at his expense without change in the Contract Price.

11.1.2 The Contract Price may only be changed by a Change Order or by a Written Amendment. Any claim for an increase or decrease in the Contract Price shall be based on written notice delivered by the party making the claim to the other party and to EOR promptly (but in no event later than ten (10) days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the amount of the claim with supporting data shall be delivered within thirty (30) days after such occurrence (unless EOR allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by claimant's written statement that the amount claimed covers all known amounts (direct, indirect and consequential) to which the claimant is entitled as a result of the occurrence of said event. All claims for adjustment in the Contract Price shall be determined by DISTRICT and EOR in accordance with paragraph 9.9.1 if the DISTRICT and CONTRACTOR cannot otherwise agree on the amount involved. No claim for an adjustment in the Contract Price shall be valid if not submitted in accordance with this paragraph 11.1.2.

11.1.3 The value of any WORK covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways:

11.1.3.1 Where the WORK involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved (subject to the provisions of Section 11.5 (Unit Price Work) inclusive).

11.1.3.2 By mutual acceptance of a lump sum (which shall include an allowance for overhead and profit in accordance with paragraph 11.3.1.2.a Contractor's Fee).

11.1.3.3 On the basis of the Cost of the WORK (determined as provided in Section 11.2, inclusive) plus a CONTRACTOR'S Fee for overhead and profit (determined as provided in Section 11.3, Contractor's Fee, inclusive).

11.2 COST OF THE WORK:

11.2.1 General. The term Cost of the WORK means the sum of all costs necessary incurred and paid by CONTRACTOR in the proper performance of the WORK. Except as otherwise



may be agreed to in writing by the DISTRICT, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items and shall not include any of the costs itemized in paragraph 11.2.2: (Exclusions to Cost of the Work).

11.2.1.1 Labor. Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the WORK under schedules of job classification agreed upon by the DISTRICT and 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 the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workers' or workmen's compensation, health and retirement benefits, sick leave, vacation and holiday pay applicable thereto. Such employees shall include superintendents and foremen at the site. The expenses of performing WORK after regular working hours, on Saturday, Sunday or legal holidays shall be included in the above to the extent authorized by the DISTRICT.

11.2.1.2 Materials and Equipment. Cost of all materials and equipment furnished and incorporated in the WORK, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless the DISTRICT deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to the DISTRICT. All trade discounts, rebates and refunds and all returns from sale of surplus materials and equipment shall accrue to the DISTRICT, and CONTRACTOR shall make provisions so that they may be obtained.

11.2.1.3 Subcontractor. Payments made by CONTRACTOR to the Subcontractors for WORK performed by Subcontractors. If required by the DISTRICT, CONTRACTOR shall obtain competitive bids from Subcontractors acceptable to CONTRACTOR and shall deliver such bids to the DISTRICT who shall then determine, with the advice of the EOR, which bids shall be accepted. If a subcontract provides that the Subcontractor is to be paid on the basis of Cost of the WORK Plus a Fee, the Subcontractor's Cost of the WORK shall be determined in the same manner as CONTRACTOR'S Cost of WORK. All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.

11.2.1.4 Costs of Special Consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys and accountants) employed for services specifically related to the WORK.

11.2.1.5 Supplemental costs include the following:

a. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and tools not owned by the workers, which are consumed in the performance of WORK, and cost less market value of such items used but not consumed which remain the property of CONTRACTOR.

b. Rentals of all construction equipment and machinery and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by the DISTRICT with the advice of EOR, and the costs of transportation, loading, unloading, installation, dismantling and removal thereof--all in accordance with terms of said rental agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the WORK. For special equipment and machinery such as power driven pumps, concrete mixers, trucks, front end loaders, backhoes, and tractors, or other equipment, required for the economical performance of the authorized WORK, the CONTRACTOR shall receive payment based on the weekly rate

divided by 40 to arrive at an hourly cost. The weekly rate shall be from the latest edition of the Rental Rate blue book for Construction Equipment, published by Equipment Guide Book Co., reduced by 25 percent. Equipment cost shall be calculated based upon the actual time the equipment is used in the WORK. If said WORK required the use of machinery not on the WORK or not to be used on the WORK, the cost of transportation, not exceeding a distance of one hundred (100) miles, of such machinery to and from the WORK shall be added to the fair rental rate; provided, however, that this shall not apply to machinery or equipment already required to be furnished under the terms of the Contract.

c. Sales, consumer, use or similar taxes related to the WORK and for which CONTRACTOR is liable, imposed by laws and regulations.

d. Royalty payments and fees for permits and licenses.

e. The site costs of utilities, fuel and sanitary facilities.

f. Cost of premiums for additional bonds and insurance required because of changes in the WORK.

11.2.2 Exclusions to Cost of the Work: The term Cost of the WORK shall not include any of the following:

11.2.2.1 Payroll costs and other compensation of CONTRACTOR'S officers, executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by CONTRACTOR whether at the site or in CONTRACTOR'S principal or a branch office for general administration of the WORK and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 11.2.1.1 or specifically covered by paragraph 11.2.1.4 -- all of which are to be considered administrative costs covered by the CONTRACTOR'S Fee.

11.2.2.2 Expenses of CONTRACTOR'S principal and branch offices other than CONTRACTOR'S office at the site.

11.2.2.3 Any part of CONTRACTOR'S capital expenses, including interest on CONTRACTOR'S capital employed for the WORK and charges against CONTRACTOR for delinquent payments.

11.2.2.4 Cost of premiums for all Bonds and for all Insurance whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same (except for the cost of premiums covered by subparagraph 11.2.1.5f above).

11.2.2.5 Costs due to the negligence or intentional acts of the CONTRACTOR, any Subcontractor, or anyone 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.

11.2.2.6 Costs associated with fringe benefits that are greater than actual costs; i.e., where worker hours exceed a typical 8-hour day and 40-hour workweek.

11.2.2.7 Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Section 11.2.

11.3 CONTRACTOR'S FEE:

11.3.1 The CONTRACTOR'S Fee for overhead and profits shall be determined as follows:

11.3.1.1 A mutually acceptable fixed fee; or if none can be agreed upon,



11.3.1.2 A fee based on the following percentages of the various portions of the Cost of the WORK:

a. For costs incurred under paragraphs 11.2.1.1 (Labor) and 11.2.1.2, (Materials and Equipment) the CONTRACTOR'S Fee shall be five (5%) percent;

b. For costs incurred under paragraph 11.2.1.3, (Subcontractors) the CONTRACTOR'S Fee shall be five percent; and if a subcontract is on the basis of Cost of the WORK Plus a Fee, the maximum allowable to CONTRACTOR on account of overhead and profit of all Subcontractors shall be five (5%) percent;

c. No fee shall be payable on the basis of costs itemized under paragraphs 11.2.1.4, (Cost of EORs) 11.2.1.5 (Supplemental Costs) and 11.2.2; (Exclusions)

d. The amount of credit to be allowed by CONTRACTOR to the DISTRICT for any such change which results in a net decrease in cost shall be the amount of the actual net decrease plus a deduction in CONTRACTOR'S Fee by an amount equal to ten percent of the net decrease; and

e. When both additions and credits are involved in any one change, the adjustment in CONTRACTOR'S Fee shall be computed on the basis of the net change in accordance with paragraphs 11.3.1.2a through 11.3.1.2d, inclusive.

11.3.2 Whenever the cost of any WORK is to be determined pursuant to paragraph 11.2.1 (General) or 11.2.2, (Exclusions), CONTRACTOR shall submit in form acceptable to EOR an itemized cost breakdown together with supporting data.

11.4 CASH ALLOWANCES:

11.4.1 It is understood that CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the WORK so covered to be done by such Subcontractors or Suppliers and for such sums within the limit of the allowances as may be acceptable to the DISTRICT, CONTRACTOR agrees that:

11.4.1.1 The allowances include the cost to CONTRACTOR (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the site, and all applicable taxes; and

11.4.1.2 CONTRACTOR'S costs for unloading and handling on the site, labor, installation costs, overhead, profit and other expenses contemplated for the allowances have been included in the Contract Price and not in the allowances. No demand for additional payment on account of any thereof shall be valid.

11.4.1.3 Prior to final payment, an appropriate Change order shall be issued as recommended by EOR to reflect actual amounts due CONTRACTOR on account of WORK covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.5 UNIT PRICE WORK:

1.5.1 Where the Contract Documents provide that all or part of the WORK is to be Unit Price WORK, initially the Contract Price shall be deemed to include for all Unit Price WORK an amount equal to the sum of the established unit prices for each separately identified item of Unit Price WORK times the estimated quantity of each item as indicated in the Contract. The estimated quantities of items of Unit Price WORK are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price WORK performed by CONTRACTOR shall be made by EOR DISTRICT in accordance with Paragraph 9.8, Determinations for Unit Prices.

11.5.2 Each unit price shall be deemed to include an amount considered by CONTRACTOR to be adequate to cover CONTRACTOR'S overhead and profit for each separately identified item.

11.5.3 Where the quantity of any item of Unit Price WORK performed by CONTRACTOR differs materially and significantly from the estimated quantity of such item indicated in the Contract and there is no corresponding adjustment with respect to any other item of WORK and if CONTRACTOR believes that CONTRACTOR has incurred additional expense as a result thereof, CONTRACTOR may make a claim for an increase in the Contract Price in accordance with Article 11 Change of Contract Price, if the parties are unable to agree as to the amount of any such increase.

11.5.4 Where the quantity of any item of Unit Price WORK performed by CONTRACTOR differs materially and significantly from the estimated quantity of such item indicated in the Contract and there is no corresponding adjustment with respect to any other item of WORK and if DISTRICT believes that CONTRACTOR has incurred reduced expense as a result thereof, DISTRICT may make a claim for a decrease in the Contract Price in accordance with Article 11 Change of Contract Price if the parties are unable to agree as to the amount of any such decrease.

11.6 OMITTED WORK:

11.6.1 The DISTRICT may at any time, by written order, without Notice to the Sureties, require omission of such contract WORK as it may find necessary or desirable. An order for omission of WORK shall be valid only by an executable change order. All WORK so ordered must be omitted by the CONTRACTOR. The amount by which the contract price shall be reduced shall be determined as follows:

11.6.1.1 By such applicable unit prices, or rates for WORK of a similar nature or character as set forth in the contract; or,

11.6.1.2. By the appropriate lump sum price set forth in the Contract; or,

11.6.1.3. By the reasonable and fair estimated cost of such omitted WORK and profit percentage as determined by the CONTRACTOR and the EOR, and approved by the DISTRICT.

ARTICLE 12 – CHANGE OF CONTRACT TIME

12.1 GENERAL

12.1.1 The Contract Time may only be changed by a Change Order or Written Amendment. Any claim for an extension or shortening of the Contract time shall be based on written notice delivered by the party making the claim to the other party and to EOR promptly (but in no event later than ten days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the extent of the claim with supporting data shall be delivered within ten (10) days after such occurrence (unless EOR allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by the claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event. Claims made beyond these time limits shall be null and void.

12.1.2 Requests for extension of time shall be fully documented and shall include copies of daily logs, letters, shipping orders, delivery tickets, and other supporting information. In case of a continuing cause of delay only one (1) claim is necessary. Normal working weeks are based on a five (5) day week. All claims for adjustment of the Contract Time shall be determined by the DISTRICT with input from the EOR. No claim



for an adjustment in the Contract Time shall be valid if not submitted in accordance with the requirements of this paragraph 12.1.1.

12.1.3 All time limits stated in the Contract Documents are of the essence of the Contract.

12.1.4 Where CONTRACTOR is prevented from completing any part of the WORK within the Contract Times (or Milestones) that, in the sole judgment of the DISTRICT whose decision shall be binding upon CONTRACTOR are due to delay beyond the control of CONTRACTOR, the Contract Times (or Milestones) shall be extended in an amount equal to the time lost due to such delay if a claim is made therefore as provided in paragraph 12.1.1.

12.1.5 Delays beyond the control of CONTRACTOR shall include, but not be limited to, acts or neglect by DISTRICT, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, (Related Work at Sight) fires, floods, epidemics, or acts of God.

12.1.6 The CONTRACTOR must mitigate any loss of time by performing but not be limited to just performing ancillary WORK as is applicable to the project.

12.1.7 Claims for delay due to inclement weather (i.e., beyond the 10 year mean average) shall be made by the 10th day of the month following the month of the delay.

12.1.8 Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of CONTRACTOR.

12.1.9 Where CONTRACTOR IS prevented from completing any part of the WORK within the Contract Times (or Milestones) due to delay beyond the control of both DISTRICT and CONTRACTOR, an extension of the Contract Times (or Milestones) in an amount equal to the time lost due to such delay shall be CONTRACTOR's sole and exclusive remedy for such delay. In no event shall DISTRICT be liable to CONTRACTOR, any Subcontractor, any Supplier, any other person or organization, or to any surety or employee or agent of any of them, for damages arising out of or resulting from (i) delays caused by or within the control of CONTRACTOR, or (ii) delays beyond the control of both parties including but not limited to fires, floods, epidemics, abnormal weather conditions, acts of God or acts of neglect by utility owners or other contractors performing other work as contemplated by Article 7, (Related work at Sight).

12.2 LIQUIDATED DAMAGES.

12.2.1 The DISTRICT and CONTRACTOR recognize and acknowledge that time is of the essence of this Contract and that the DISTRICT shall suffer financial loss if the WORK is not completed within the times specified in paragraph 2.3 of the Supplementary Conditions and the Notice To Proceed, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. Each of the parties acknowledges that it has attempted to quantify the damages which would be suffered by DISTRICT in the event of the failure of CONTRACTOR to perform in a timely manner, but neither one has been capable of ascertaining such damages with a certainty. DISTRICT and CONTRACTOR also recognize and acknowledge the delays, expense and difficulties involved in proving in a legal proceeding the actual loss suffered by the DISTRICT if the WORK is not completed on time. Accordingly, instead of requiring any such proof, the DISTRICT and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay the DISTRICT:

| Base Bid Liquidated Damages Per Day | (\$ Dollar Amt |
|-------------------------------------|----------------|
| \$1000 to \$20,000 | 100 |
| 20,001 to 75,000 | 500 |
| 75,001 to 150,000 | 200 |
| 150,000 to 350,000 | 750 |
| 350,001 to 750,000 | 800 |
| 750,001 to 1,000,000 | 1,000 |
| 1,000,001 to 2,000,000 | 1,200 |
| 2,000,001 to 3,000,000 | 1,500 |
| 3,000,001 to 4,000,000 | 1,600 |
| 4,000,001 to 5,000,000 | 1,700 |
| 5,000,001 to 6,000,000 | 1,800 |
| 6,000,001 to 7,000,000 | 1,900 |
| 7,000,001 to 8,000,000 | 2,000 |
| 8,000,001 to 9,000,000 | 2,100 |
| 9,000,001 to 10,000,000 | 2,200 |
| 10,000,001 to 11,000,000 | 2,300 |
| 11,000,001 to 12,000,000 | 2,400 |
| 12,000,001 and over | 2,500 |

for each day that expires after the time specified in paragraph 2.3 of the Supplementary Conditions, and the NOTICE TO PROCEED for substantial completion.

12.2.2 After Substantial Completion, if CONTRACTOR shall neglect, refuse or fail to complete the remaining WORK within the Contract Time or any proper extension thereof granted by the DISTRICT, CONTRACTOR shall pay DISTRICT

Base Bid Liquidated Damages Per Day

| | |
|--------------------------|---------|
| \$1000 to \$20,000 | \$25.00 |
| 20,001 to 75,000 | 50.00 |
| 75,001 to 150,000 | 125.00 |
| 150,000 to 350,000 | 187.50 |
| 350,001 to 750,000 | 200.00 |
| 750,001 to 1,000,000 | 250.00 |
| 1,000,001 to 2,000,000 | 300.00 |
| 2,000,001 to 3,000,000 | 370.00 |
| 3,000,001 to 4,000,000 | 400.00 |
| 4,000,001 to 5,000,000 | 425.00 |
| 5,000,001 to 6,000,000 | 450.00 |
| 6,000,001 to 7,000,000 | 475.00 |
| 7,000,001 to 8,000,000 | 500.00 |
| 8,000,001 to 9,000,000 | 525.00 |
| 9,000,001 to 10,000,000 | 550.00 |
| 10,000,001 to 11,000,000 | 575.00 |
| 11,000,001 to 12,000,000 | 600.00 |
| 12,000,001 and over | 625.00 |

for each day that expires after the time specified in paragraph 2.3 of the Supplementary Conditions and as stated in the NOTICE TO PROCEED.

12.2.3 This sum is not a penalty, being the liquidated damages the DISTRICT shall have sustained in event of such default by the Contractor. The DISTRICT reserves the right to additionally recover direct job site expenses incurred during the period of any delay. The Contractor shall be liable for liquidated damages even if the Contract is terminated by the DISTRICT for cause or if the Contractor abandons the Work. The liability of the Contractor and its surety or sureties for damages provided by this Article is joint and several.

12.3 REIMBURSEMENT OF CONSULTANT EXPENSES.:

12.3.1 Should the completion of this Contract be delayed beyond the specified or adjusted time limit, CONTRACTOR shall reimburse the DISTRICT for all expenses of consulting and inspection incurred by the DISTRICT during the period between said specified or adjusted time and the actual date of final completion. All such expenses for consulting and inspection



incurred by the DISTRICT shall be charged to CONTRACTOR and be deducted from payments due CONTRACTOR as provided by this Contract. Said expenses shall be further defined as EOR charges associated with the construction contract administration, including resident project representative costs.

ARTICLE 13 – TESTS AND INSPECTIONS, CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.1 NOTICE OF DEFECTS:

13.1.1 Prompt notice of all defects for which DISTRICT or EOR have actual knowledge shall be given to CONTRACTOR. All *defective* WORK, whether or not in place, may be rejected, corrected or accepted as provided in Article 13, Test and Inspections: Correction, Removal or Acceptance of Defective Work.

13.1.2 Unremedied defects identified for correction during the guarantee period but remaining after its expiration shall be considered as part of the obligations of the guarantee. Defects in material, workmanship or equipment, which are remedied as a result of obligations of the guarantee, shall subject the remedied portion of the WORK to an extended guarantee period of one year after the defect has been remedied. The Surety shall be bound with and for the Contractor in the Contractor's faithful observance of the guarantee.

13.2 ACCESS TO WORK:

13.2.1 EOR'S and EOR'S representatives, other representatives of the DISTRICT, testing agencies and governmental agencies with jurisdictional interests shall have access to the WORK at reasonable times for their observation, inspecting and testing. CONTRACTOR shall provide proper and safe conditions for such access.

13.3 TESTS AND INSPECTIONS:

13.3.1 CONTRACTOR shall give EOR timely notice of readiness of the WORK for all required inspections, tests or approvals.

13.3.2 If Laws or Regulations of any public body having jurisdiction require any WORK (or part thereof) to specifically be inspected, tested or approved, CONTRACTOR shall assume full responsibility therefor, pay all costs in connection therewith and furnish EOR the required certificates of inspection, testing or approval. CONTRACTOR shall also be responsible for and shall pay all costs in connection with any inspection or testing required in connection with the DISTRICT'S or EOR'S acceptance of a Supplier of materials or equipment proposed to be incorporated in the WORK, or of materials or equipment submitted for approval prior to CONTRACTOR'S purchase thereof for incorporation in the WORK.

13.3.3 All inspections, tests or approvals other than those required by Laws or Regulations of any public body having jurisdiction shall be performed by organizations acceptable to the DISTRICT (or by EOR if so specified).

13.3.4 If any WORK (including the WORK of others) that is to be inspected, tested or approved is covered without written concurrence of EOR, it must, if requested by EOR, be uncovered for observation. Such uncovering shall be at CONTRACTOR'S expense unless CONTRACTOR has given EOR timely notice of CONTRACTOR'S intention to cover the same and EOR has not acted with reasonable promptness in response to such notice.

13.3.5 Neither observations by EOR nor inspections, tests or approvals by others shall relieve CONTRACTOR from CONTRACTOR'S obligation's to perform the WORK in accordance with the Contract Documents.

13.3.6 General: For tests specified to be made by the Contractor, the testing personnel shall make the necessary

inspections and tests and the reports thereof shall be in such form as will facilitate checking to determine compliance with the Contract Documents. Five (5) copies of the reports shall be submitted and authoritative certification thereof must be furnished to the Consultant as a prerequisite for the acceptance of any material or equipment.

13.3.6.1 If, in the making of any test of any material or equipment, it is ascertained by the EOR that the material or equipment does not comply with the Contract Documents, the Contractor will be notified thereof and he will be directed to refrain from delivering said material or equipment, or to remove it promptly from the site or from the work and replace it with acceptable material, without cost to the DISTRICT.

13.3.6.2 Tests of electrical and mechanical equipment and appliances shall be conducted in accordance with the recognized test codes.

13.3.7 Costs: All inspection and testing of materials furnished under this Contract will be provided by the Contractor, unless otherwise expressly specified.

13.3.7.1 Materials and equipment submitted by the Contractor as the equivalent to those specifically named in the Contract may be tested by the DISTRICT for compliance. The Contractor shall reimburse the DISTRICT for the expenditures incurred in making such tests of materials and equipment which are rejected for non-compliance.

13.3.8 Certificate of Manufacture: Contractor shall furnish Consultant authoritative evidence in the form of Certificate of Manufacture that the materials to be used in the work have been manufactured and tested in conformity with the Contract Documents.

13.3.8.1 These certificates shall be notarized and shall include copies of the results of physical tests and chemical analyses, where necessary, that have been made directly on the product or on similar products of the manufacturer.

13.3.9 Start up Tests: As soon as conditions permit, the Contractor shall furnish all labor, materials, and instruments and shall make start-up tests of equipment.

13.3.9.1 If the start-up tests disclose any equipment furnished under this Contract which does not comply with the requirements of the Contract Documents, the Contractor shall, prior to demonstration tests, make all changes, adjustments and replacements required. The furnishing Contractor shall assist in the start-up tests as applicable.

13.4 TESTING AND INSPECTIONS SPECIFIC RESPONSIBILITIES

13.4.1 The independent firm will perform tests, inspections and other services specified in individual specification sections and as may be required by Owner.

13.4.1.1 Laboratory: Authorized to operate at Project location.

13.4.1.2 Laboratory Staff: Maintain full time specialist on staff to review services.

13.4.1.3 Testing Equipment: Calibrated at reasonable intervals with devices of accuracy traceable to National Bureau of Standards or accepted values of natural physical constants.

13.4.2 Testing, inspections and source quality control may occur on or off project site. Perform off-site testing as required by Architect/Engineer or Owner.

13.4.3 Reports will be submitted by independent firm to Architect/Engineer, Contractor, and authority having jurisdiction, in duplicate, indicating observations and results of tests and



indicating compliance or non-compliance with Contract Documents. Submit final report indicating correction of Work previously reported as non-compliant.

13.4.4 Cooperate with independent firm; furnish samples of materials, design mix, equipment, tools, storage, safe access, and assistance by incidental labor as requested.

13.4.4.1 Notify Owner, Architect/Engineer and independent firm [24] hours prior to expected time for operations requiring services.

13.4.4.2 Make arrangements with independent firm and pay for additional samples and tests required for Contractor's use.

13.4.5 Testing and employment of testing agency or laboratory shall not relieve Contractor of obligation to perform Work in accordance with requirements of Contract Documents.

13.4.6 Re-testing or re-inspection required because of non-conformance to specified requirements shall be performed by same independent firm on instructions by Architect/Engineer. Payment for re-testing or re-inspection will be charged to Contractor by deducting testing charges from Contract Sum/Price.

13.4.7 Testing Agency Responsibilities:

13.4.7.1 Test samples of mixes submitted by Contractor.

13.4.7.2 Provide qualified personnel at site.

13.4.7.3 Cooperate with Owner, Architect/Engineer and Contractor in performance of services.

13.4.7.4 Perform specified sampling and testing of products in accordance with specified standards.

13.4.7.5 Ascertain compliance of materials and mixes with requirements of Contract Documents.

13.4.7.6 Promptly notify Owner, Architect/Engineer and Contractor of observed irregularities or non-conformance of Work or products.

13.4.7.7 Perform additional tests required by Architect/Engineer.

13.4.8 Testing Agency Reports

After each test, promptly submit five (5) copies of report to Architect/Engineer, Contractor, and authority having jurisdiction. When requested by Architect/Engineer, provide interpretation of test results. Include the following:

13.4.8.1 Date issued.

13.4.8.2 Project title and number.

13.4.8.3 Name of inspector.

13.4.8.4 Date and time of sampling or inspection.

13.4.8.5 Identification of product and specifications section.

13.4.8.6 Location in Project.

13.4.8.7 Type of inspection or test.

13.4.8.8 Date of test.

13.4.8.9 Results of tests.

13.4.8.10 Conformance with Contract Documents

13.4.9 Limits On Testing Authority:

13.4.9.1 Agency or laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.

13.4.9.2 Agency or laboratory may not approve or accept any portion of the Work.

13.4.9.3 Agency or laboratory may not assume duties of Contractor.

13.4.9.4 Agency or laboratory has no authority to stop the Work.

13.5 MANUFACTURERS' FIELD SERVICES

13.5.1 When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, as applicable, and to initiate instructions when necessary.

13.5.2 Submit qualifications of observer to Architect/Engineer [30] days in advance of required observations.

13.5.3 Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

13.6. UNCOVERING WORK:

13.6.1. If any WORK is covered contrary to the request of EOR, it must, if requested by EOR, be uncovered for EOR'S observation and replaced, at CONTRACTOR'S expense.

13.6.2. If EOR considers it necessary or advisable that covered WORK be observed by EOR or inspected or tested by others, CONTRACTOR, at EOR'S request shall uncover, expose or otherwise make available for observation, inspection or testing as EOR 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*, CONTRACTOR shall bear all direct, indirect and consequential costs of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, (including but not limited to fees and charges of engineers, architects, attorneys and other professionals), and the DISTRICT shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, may make a claim therefor as provided in Article 11. If, however, such WORK is not found to be *defective*, 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; and if the parties are unable to agree as to the amount or extent thereof. CONTRACTOR may make a claim therefor as provided in Article 11 Change of Contract Price and Article 12, Change of Contract Time.

13.7 DISTRICT MAY STOP THE WORK:

13.7.1 If the WORK is *defective*, or CONTRACTOR fails to supply sufficient skilled workers or suitable materials or equipment, or fails to furnish or perform the WORK in such a way that the completed WORK shall conform to the Contract Documents, the DISTRICT may order CONTRACTOR to stop the WORK, or any portion thereof, until the cause for such order has been eliminated; however, this right of the DISTRICT to stop the WORK shall not give rise to any duty on the part of the DISTRICT to exercise this right for the benefit of CONTRACTOR or any other party.

13.8 CORRECTION OR REMOVAL OF DEFECTIVE WORK:

13.8.1 If required by EOR, CONTRACTOR shall promptly, as directed, either correct all *defective* WORK, whether or not fabricated, installed or completed, or, if the WORK has been rejected by EOR, remove it from the site and replace it with non-*defective* WORK. CONTRACTOR shall bear all direct, indirect, and consequential costs of such correction or removal (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) made necessary thereby.



13.8.2 If the Contractor refuses to comply, the DISTRICT has the right to do either (or more) of the following:

13.8.3 The DISTRICT has the right to correct any work so performed by the CONTRACTOR and deduct the expenses for doing so from the final payment due the CONTRACTOR, or

13.8.4 The DISTRICT shall hold back final payment due CONTRACTOR until such time as the work is completed to the satisfaction of the DISTRICT'S PROJECT MANAGER and in compliance with the DISTRICT'S specifications. The DISTRICT'S PROJECT MANAGER shall have the sole discretion to determine if the work is satisfactory and in compliance with specifications.

13.8.5 The remedies contained herein are not exclusive and the OWNER reserves the right to pursue any and all other remedies it deems applicable.

13.9 ONE-YEAR CORRECTION PERIOD:

13.9.1 If within one year after the date of Acceptance of WORK or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any WORK is found to be *defective*, CONTRACTOR shall promptly, without cost to the DISTRICT and in accordance with the DISTRICT'S written instructions, either correct such *defective* WORK, or, if it has been rejected by the DISTRICT, remove it from the site and replace it with non-*defective* WORK.

13.9.2 If 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 DISTRICT may have the *defective* WORK corrected or the rejected WORK removed and replaced, and all direct, indirect and consequential costs of such removal and replacement (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) shall be paid by CONTRACTOR.

13.9.3 In special circumstances where a particular item of equipment is placed in continuous service before Final Acceptance of all the WORK, the correction period for that item may start to run from an earlier date if so provided in the Specifications or by Written Amendment.

13.9.4 Nothing herein shall be deemed a waiver of the statute of limitations as provided in Florida Law.

13.9.5 Where *defective* WORK (and damage to other WORK resulting therefrom) has been corrected, removed or replaced under this paragraph 13.7., the correction period hereunder with respect to such WORK shall be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

13.10 ACCEPTANCE OF DEFFECTIVE WORK:

13.10.1 If, instead of requiring correction or removal and replacement of *defective* WORK, DISTRICT (and, prior to EOR's recommendation of final payment, also EOR) prefers to accept it, DISTRICT may do so. CONTRACTOR shall pay all claims, costs, losses and damages attributable to DISTRICT'S evaluation of and determination to accept such *defective* WORK (such costs to be approved by EOR as to reasonableness and to include but not be limited to fees and charges of engineers, architects, attorneys and other professionals).

13.10.2 If any such acceptance occurs prior to CONSULTANT'S recommendation of final payment, a Change Order shall be issued incorporating the necessary revisions in the Contract Documents with respect to the WORK; and the DISTRICT shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, the DISTRICT may make a claim therefor as provided in Article 11, Change of Contract Price. If the

acceptance occurs after such recommendation, CONTRACTOR shall pay an appropriate amount to the DISTRICT.

13.11 DISTRICT MAY CORRECT DEFECTIVE WORK:

13.11.1 If CONTRACTOR fails within thirty days (30) after written notice of EOR to proceed to correct and to correct *defective* WORK or to remove and replace rejected WORK as required by CONSULTANT in accordance with paragraph 13.7.1, or if CONTRACTOR fails to perform the WORK in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract Documents, the DISTRICT may, after seven days written notice to CONTRACTOR, correct and remedy any such deficiency.

13.11.2 In exercising the rights and remedies under this paragraph the DISTRICT shall proceed expeditiously. To the extent necessary to complete corrective and remedial action, the DISTRICT may exclude CONTRACTOR from all or part of the site, take possession of all or part of the WORK, and suspend CONTRACTOR'S services related thereto, take possession of CONTRACTOR'S tools, appliances, construction equipment and machinery at the site and incorporate in the WORK all materials and equipment stored at the site or for which the DISTRICT has paid CONTRACTOR but which are stored elsewhere. CONTRACTOR shall allow the DISTRICT, the DISTRICT'S representative, agents and employees such access to the site as may be necessary to enable the DISTRICT to exercise the rights and remedies under this paragraph.

13.11.3 All direct, indirect and consequential costs of the DISTRICT in exercising such rights and remedies shall be charged against CONTRACTOR by DISTRICT and a Change Order shall be issued incorporating the necessary revisions in the Contract Documents with respect to the WORK; and the DISTRICT shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, the DISTRICT may make a claim therefor as provided in Article 11, Change of Contract Price. Such direct, indirect and consequential costs shall include but not be limited to fees and charges of engineers, architects, attorneys and other professionals, all court costs and all costs of repair and/or replacement of WORK of others destroyed or damaged by correction, removal or replacement of CONTRACTOR'S *defective* WORK. Contractor shall also be responsible for restoring any other sites affected by such repairs or remedial work at no cost to DISTRICT. 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 DISTRICT of the DISTRICT'S rights and remedies hereunder.

ARTICLE 14 – PAYMENTS TO CONTRACTOR AND COMPLETION

14.1 SCHEDULE OF VALUES

14.1.1 The schedule of values established as provided in paragraph 2.6., Finalizing Schedules, shall serve as the basis for progress payments and shall be incorporated into a form of Application for Payment acceptable to EOR.

14.2 UNIT PRICE BID SCHEDULE

14.2.1 Progress payments on account of Unit Price WORK shall be based on the number of units completed.

14.2.2 The quantities for payment under this Contract shall be determined by actual measurement of the completed items, in place, ready for service and accepted by the DISTRICT, in accordance with the applicable method of measurement therefore contained herein.

14.2.3 The Contractor shall receive and accept the compensation provided in the Bid and the Contract as full payment for furnishing all materials, labor, tools and equipment,



for performing all operations necessary to complete the work under the Contract, and also in full payment for all loss or damages arising from the nature of the work, or from any discrepancy between the actual quantities of work and quantities herein estimated by the EOR, or from the action of the elements or from any unforeseen difficulties which may be encountered during the prosecution of the work until the final acceptance by the DISTRICT.

14.2.4 The prices stated in the Bid include all costs and expenses for taxes, labor, equipment, materials, commissions, transportation charges and expenses, patent fees and royalties, labor for handling materials during inspection, together with any and all other costs and expenses for performing and completing the work as shown on the Drawings and specified herein. The basis of payment for an item at the unit price shown in the bid shall be in accordance with the description of that item.

14.3 APPLICATION FOR PROGRESS PAYMENTS:

14.3.1 Unless otherwise prescribed by law, at the end of each month, the CONTRACTOR shall submit to the EOR for review, an Application for Progress Payment filled out and signed by the CONTRACTOR covering the WORK completed as of the date of the Application and accomplished by such supporting documentation as is required by the Contract Documents.

14.3.2 The Application for Progress Payment shall identify, as a subtotal, the amount of the CONTRACTOR'S Total Earnings to Date, plus the Value of Materials Stored which have not yet been incorporated in the WORK, less a deductive adjustment for materials stored which have been installed which were not previously incorporated in the WORK, but for which payment was allowed.

14.3.3 The Net Payment Due to the CONTRACTOR shall be the above mentioned subtotal from which shall be deducted the amount of retainage specified in the Contract, and the total amount of all previous approved Applications for Progress Payment submitted by the CONTRACTOR. Retainage shall be calculated based upon the above-mentioned subtotal.

The above calculation in tabular form is as follows:

| | |
|--|-------|
| Total Earnings to Date | \$ |
| Value of Materials Stored | \$ |
| Less Value of Materials Stored for which payment was allowed and which have been installed | (\$) |
| Sub Total | \$ |
| Less Retainage (based on sub total) | (\$) |
| Less total of all previous approved Applications for Progress Payment | (\$) |
| NET PAYMENT DUE | \$ |

14.3.4 The Value of Materials Stored shall be an amount equal to the specified percent of the value of same as set forth in the Contract or Schedule of Values. Said amount shall be based upon the value of all acceptable materials and equipment not incorporated in the WORK but delivered and suitably stored at the site or at another location agreed to in writing; provided, each such individual item has a value of more than \$5,000 and shall become a permanent part of the WORK and is planned for installation within the following thirty (30) days. The Application for Progress Payment shall also be accompanied by a Bill of Sale, paid invoice, or other documentation warranting that the DISTRICT has received the materials and equipment free and clear of all liens, charges, security interests, and encumbrances (which are hereinafter in these General Conditions referred to as "Liens") and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect the DISTRICT'S interest therein, all of which shall be satisfactory to the DISTRICT.

14.3.5 List each Change Order executed prior to date of submission, at the end of the continuation sheets. List by Change Order Number, and description, as for an original component item of work.

14.3.6 As provided for in the "Application for Payment" form, the Contractor shall certify, for each current pay request, that all previous progress payments received from the DISTRICT, under this Contract, have been applied by the Contractor to discharge in full all obligations of the Contractor in connection with Work covered by prior Applications for Payment, and all materials and equipment incorporated into the Work are free and clear of all liens, claims, security interest and encumbrances. Contractor shall attach to each Application for Payment like affidavits by all subcontractors

14.4 CONTRACTOR'S WARRANTY OF TITLE:

14.4.1 The CONTRACTOR warrants and guarantees that title to all Work and equipment covered by an Application for Payment, whether incorporated in the Project or not, shall have passed to the DISTRICT prior to the making of the Application for Payment, free and clear of all liens, claims, security interests and encumbrances (hereafter in these General Conditions referred to as "Liens"); and that no work or equipment covered by an Application for Payment shall have been acquired by the CONTRACTOR or by any other person performing the Work at the site or furnishing equipment for the Project, subject to an agreement under which an interest therein or encumbrance thereon is retained by the seller or otherwise imposed by the CONTRACTOR or such other person.

14.5 REVIEW OF APPLICATIONS FOR PROGRESS PAYMENT:

14.5.1 EOR shall, within ten days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to the DISTRICT, or return the Application to CONTRACTOR indicating in writing EOR'S reasons for refusing to recommend payment. In the latter case, CONTRACTOR may make necessary corrections and resubmit the Application. Thirty days after receipt of the Application for Payment by the DISTRICT with EOR'S recommendation, the amount recommended shall (subject to the provisions of the last sentence of paragraph 14.5.4) become due and when due shall be paid by the DISTRICT to CONTRACTOR.

14.5.2 EORS recommendation of any payment requested in the application for payment shall not prohibit the DISTRICT from withholding payment or prohibit the DISTRICT from paying additionally sums regarding other matters or issues between the parties.

14.5.3 EOR'S recommendation of final payment shall constitute an additional representation by EOR to the DISTRICT that the conditions precedent to CONTRACTOR'S being entitled to final payment as set forth in paragraph 14.10, Final Payment and Acceptance, have been fulfilled.

14.5.4. EOR may refuse to recommend the whole or any part of any payment if, in EOR'S opinion, it would be incorrect to make such representations to the DISTRICT. The EOR may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended, to such extent as may be necessary in EOR'S opinion to protect the DISTRICT from loss, including but not limited to:

14.5.4.1 The WORK is *defective*, or completed WORK has been damaged requiring correction or replacement.

14.5.4.2 The Contract Price has been reduced by a Written Amendment or Change Order.



14.5.4.3 The DISTRICT has been required to correct *defective* WORK or complete WORK in accordance with paragraph 13.9, or

14.5.4.4 Of EOR'S actual knowledge of the occurrence of any of the events enumerated in paragraphs 15.2.1.1 through 15.2.1.9 inclusive (District May Terminate).

14.5.5 The DISTRICT may refuse to make payment of the full amount recommended by the EOR because claims have been made against the DISTRICT on account of CONTRACTOR'S performance or furnishing of the WORK, or there are other items entitling the DISTRICT to credit against the amount recommended, but the DISTRICT must give CONTRACTOR written notice (with a copy to EOR) stating the reasons for such action.

14.5.6 The Work for which payment is requested cannot be verified,

14.5.7 Claims or Liens have been filed or there is reasonable evidence indicating the probable filing thereof,

14.5.8 Of unsatisfactory prosecution of the Work, including failure to clean up as required

14.5.9 Of persistent failure to cooperate with other Contractors on the Project and persistent failure to carry out the Work in accordance with the Contract Documents,

14.5.10 Of liquidated damages payable by the CONTRACTOR, or

14.5.11 Of any other violation of, or failure to comply with, the provisions of the Contract Documents

14.6 SUBSTANTIAL COMPLETION:

14.6.1 When the CONTRACTOR considers the entire WORK ready for its intended use, the CONTRACTOR shall notify the DISTRICT and the EOR in writing that the WORK is substantially complete and request that the EOR prepare a Certificate of Substantial Completion

14.6.2 For construction projects having an estimated cost of less than \$10 million, the DISTRICT, the EOR and the CONTRACTOR shall make an inspection of the WORK within thirty (30) calendar days after the notice from the CONTRACTOR that the work is substantially complete to determine the status of completion.

14.6.3 For construction projects having an estimated cost of more than \$10 million, the DISTRICT, the EOR and the CONTRACTOR shall make an inspection of the WORK within thirty (30) calendar days unless otherwise extended by contract not to exceed sixty (60) calendar days after notice from the CONTRACTOR that the work is substantially complete to determine the status of completion. If the EOR does not consider the WORK substantially complete, the EOR shall notify the CONTRACTOR in writing giving the reasons therefore. If the EOR considers the WORK to be substantially complete, the EOR shall prepare and deliver to the DISTRICT for its execution and recordation the Certificate of Substantial Completion signed by the EOR and CONTRACTOR, which shall fix the Date of Substantial Completion.

14.6.4 The DISTRICT shall have the right to exclude CONTRACTOR from the WORK after the date of Substantial Completion, but the DISTRICT shall allow CONTRACTOR reasonable access to complete or correct items on the "punch list".

14.7 PARTIAL UTILIZATION:

14.7.1 The DISTRICT shall have the right to enter the premises for the purpose of doing work not covered by the Contract Documents. This provision shall not be construed as

relieving the CONTRACTOR of the sole responsibility for the care and protection of the Work, or the restoration of any damaged Work except such as may be caused by agent or employees of the DISTRICT

14.7.2 Prior to Substantial Completion, the DISTRICT, with the approval of the EOR and with the concurrence of the CONTRACTOR, may use any completed or substantially completed portion of the Work. Such use shall not constitute an acceptance of such portions of the Work.

14.7.3 Use by the DISTRICT of any finished part of the WORK, which has specifically been identified in the Contract Documents, or which the DISTRICT, EOR and CONTRACTOR agree constitutes a separately functioning and useable part of the WORK that can be used by the DISTRICT without significant interference with CONTRACTOR'S performance of the remainder of the WORK, may be accomplished prior to Substantial Completion of all WORK subject to the following:

14.7.4 The DISTRICT at any time may request CONTRACTOR in writing to permit the DISTRICT to use any such part of the WORK which the DISTRICT believes to be ready for its intended use and substantially complete. If CONTRACTOR agrees, CONTRACTOR shall certify to the DISTRICT and EOR that said part of the WORK is substantially complete and request CONSULTANT to issue a certificate of Substantial Completion for that part of the WORK. CONTRACTOR at any time may notify the DISTRICT and EOR in writing that CONTRACTOR considers any such part of the WORK ready for its intended use and substantially complete and request EOR to issue a certificate of Substantial Completion for that part of the WORK. Within a reasonable time after either such request, the DISTRICT, CONTRACTOR and EOR shall make an inspection of that part of WORK to determine its status of completion. If CONSULTANT does not consider that part of the WORK to be substantially complete, EOR shall notify the DISTRICT and CONTRACTOR in writing giving the reasons therefore. If EOR considers that part of the WORK to be substantially complete, the provisions of paragraphs 14.6.1 and 14.6.2 shall apply with respect to certification of Substantial Completion of that part of the WORK and the division of responsibility in respect thereof and access thereto.

14.7.5 The DISTRICT may at any time request CONTRACTOR in writing to permit the DISTRICT to take over operation of any such part of the WORK although it is not substantially complete. A copy of such request shall be sent to EOR and within a reasonable time thereafter the DISTRICT, CONTRACTOR and EOR shall make an inspection of that part of the WORK to determine its status of completion and shall prepare a list of items remaining to be completed or corrected thereon before final payment. If CONTRACTOR does not object in writing to the DISTRICT and EOR that such part of the WORK is not ready for separate operation by the DISTRICT, EOR shall finalize the list of items to be completed or corrected and shall deliver such list to the DISTRICT and CONTRACTOR together with a written recommendation as to the division of responsibilities pending final judgment between the DISTRICT and CONTRACTOR with respect to security, operation, safety, maintenance, utilities, insurance, warranties and guarantees for that part of the WORK which shall become binding upon the DISTRICT and CONTRACTOR at the time when the DISTRICT takes over such operation (unless they shall have otherwise agreed in writing and so informed EOR). During such operation and prior to Substantial Completion of such part of the WORK, the DISTRICT shall allow CONTRACTOR reasonable access to complete or correct items on said list and to complete other related WORK.

14.8. FINAL INSPECTION:

14.8.1 Upon written notice from CONTRACTOR that the entire WORK or an agreed portion thereof is complete, EOR shall



make a final inspection with the DISTRICT and CONTRACTOR and shall notify CONTRACTOR in writing of all particulars in which this inspection reveals that the WORK is incomplete, *defective*, or not in accordance with the Contract Documents. CONTRACTOR shall immediately take such measures as are necessary to remedy such deficiencies.

14.9 FINAL APPLICATION FOR PAYMENT:

14.9.1 After CONTRACTOR has completed in writing all such corrections to the satisfaction of EOR and delivered all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, marked-up record documents (as provided in paragraph 14.6, Substantial Completion) and other documents--all as required by the Contract Documents, and after EOR has indicated in writing that the WORK is acceptable and has been completed in conformance with the drawings and specifications and any approved changes thereto, CONTRACTOR may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied by: (i) all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required, (ii) consent of the surety, if any, to final payment, and (iii) complete and legally effective releases or waivers (satisfactory to DISTRICT) of all Liens arising out of or filed in connection with the WORK.

14.10 FINAL PAYMENT AND ACCEPTANCE:

14.10.1 Upon receipt of written notice from the Contractor that the WORK has been completed in conformity with the Drawings and Specifications and any approved changes thereto, and receipt of the Final Application for Payment, Final Receipt and Release of Lien and accompanying documentation, the DISTRICT'S EOR shall promptly examine the WORK and, making such tests as he may deem proper and using all of the care and judgment normally exercised in the examination of completed WORK by a properly qualified and experienced Professional EOR, shall satisfy himself that the CONTRACTOR'S statement appears to be correct and the CONTRACTOR'S other obligations under the Contract Documents have been fulfilled. He shall then inform the DISTRICT in writing that he has examined the WORK and that it appears, to the best of his knowledge and belief, to conform to the Contract Drawings, Specifications and any approved Change Orders, that the CONTRACTOR'S other obligations under the Contract Documents have been fulfilled, and that he therefore recommends acceptance of the WORK for ownership and Final Payment to the CONTRACTOR. However, it is agreed by the DISTRICT and the CONTRACTOR that such statement by the DISTRICT'S EOR does not in any way relieve the CONTRACTOR from his responsibility to deliver a fully completed job in a good and workmanlike condition, and does not render the EOR or the DISTRICT liable for any faulty WORK done or defective materials or equipment used by the CONTRACTOR.

14.10.2 The EOR shall then make a final estimate of the value of all WORK done and shall deduct all previous payments which have been made. The EOR shall report such estimate to the DISTRICT together with his recommendation as to the acceptance of the WORK or his findings as to any deficiencies therein. After receipt and acceptance by the DISTRICT of the properly executed Final Warranty of Title and after approval of the EOR'S estimate and recommendation to the DISTRICT, the DISTRICT shall make final payment to the CONTRACTOR of the Amount remaining after deducting all prior payments and all amounts to be kept or retained under the provisions of the Contract Documents, or as may be lawfully retained, including, but not limited to, Liquidated Damages, as applicable. Title passes and warranty begins at final acceptance.

14.10.3. All prior estimates are subject to correction in the final estimate. Thirty days after approval by the DISTRICT of the application for final payment, the amount recommended by EOR shall become due and shall be paid to Contractor.

Section IV

14.11 WAIVER OF CLAIMS:

14.11.1 The making and acceptance of final payment shall constitute:

14.11.1.1 A waiver of all claims by DISTRICT against CONTRACTOR, except claims arising from unsettled Liens, from *defective* WORK appearing after final inspection pursuant to paragraph 14.8, Final Inspection, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from CONTRACTOR'S continuing obligations under the Contract Documents or the Public Construction Bond and Payment Bonds; and

14.11.1.2 a waiver of all claims by CONTRACTOR against DISTRICT other than those previously made in writing and still unsettled.

14.12 PUNCHLIST PROCEDURES:

For Contracts over \$10,000,000.00: Further to §218.735(7)(a)(ii) Florida Statutes, punchlist procedures to render the Work complete, satisfactory and acceptable are established as follows:

14.12.1 Within twenty (20) days of Substantial Completion of the construction services purchased as defined in the Contract, Contractor shall schedule a walkthrough with DISTRICT AND EOR ("Initial Walkthrough" a/k/a "IW"). The purpose of the IW is to develop a preliminary checklist ("Checklist") of items to be performed by the Contractor, based upon observations made jointly between the Contractor, EOR and DISTRICT during the IW. The IW is to occur within twenty (20) days of Substantial Completion of the Work as defined by the Contract, again predicated upon the Contractor's timely initiation of a request for the IW. At its option, DISTRICT may conduct the IW with its and EOR.

14.12.2 Contractor shall endeavor to address and complete as many items as possible noted on the Checklist either during the IW itself, or thereafter for a period of forty-five (45) days from the date of the IW.

14.12.3 No later than forty-five (45) days following the scheduled IW, Contractor shall again initiate and request a second walkthrough of the Project with DISTRICT. The purpose of this second walkthrough is to identify which items remain to be performed from the IW Checklist and to supplement that list as necessary (based, for example, upon work which may have been damaged as a result of the Contractor's performance of completion of items contained on the IW Checklist) and for the purpose of developing a joint Final Punchlist.

14.12.4 The intent of this section is for DISTRICT and the Contractor to cooperate to develop a Final Punchlist to be completed no later than forty-five (45) days from the date of reaching Substantial Completion of the construction services purchase as defined in the Contract.

14.12.5 In no event may the Contractor request payment of final retainage under §218.735(7)(d) Florida Statutes until the Contractor considers the Final Punch list to be 100% complete.

14.12.6 Contractor agrees to complete the Final Punchlist items within sixty (60) days of the date of its issuance by DISTRICT.

14.12.7 Contractor acknowledges and agrees that no item contained on the Final Punchlist shall be considered a warranty item until such time as (a) the Final Punchlist is 100% complete, and (b) DISTRICT has been able to operate or utilize the affected punchlist item for an additional period of fifteen (15) days.

14.12.8 Contractor acknowledges and agrees that DISTRICT may, at its option, during performance of the Work and prior to Substantial Completion, issue lists of identified non-conforming or corrective work for the Contractor to address. The



intent of any such DISTRICT generated lists prior to Substantial Completion is to attempt to streamline the punchlist process upon achieving Substantial Completion, and to allow for the Contractor to address needed areas of corrective work as they may be observed by DISTRICT during performance of the Work.

14.12.9 Contractor acknowledges and agrees that in calculating 150% of the amount which may be withheld by DISTRICT as to any Final Punchlist item for which a good faith basis exists as to it being complete, as provided for by §218.735(7)(d) Florida Statutes, DISTRICT may include within such percentage calculation its total costs for completing such item of work, including its administrative costs as well as costs to address other services needed or areas of work which may be affected in order to achieve full completion of the Final Punchlist item. Such percentage shall in no event relate to the schedule of value associated with such Work activity, but rather total costs are based upon the value (i.e. cost) of completing such Work activity based upon market conditions at the time of Final Punchlist completion.

For Contracts between \$200,000.00 and \$10,000,000.00: Further to §218.735(7)(a)(ii) Florida Statutes, punchlist procedures to render the Work complete, satisfactory and acceptable are established as follows:

14.12.10 Within five (5) days of Substantial Completion of the construction services purchased as defined in the Contract, Contractor shall schedule a walkthrough with DISTRICT ("Initial Walkthrough" a/k/a "IW"). The purpose of the IW is to develop a preliminary checklist ("Checklist") of items to be performed by the Contractor, based upon observations made jointly between the Contractor and DISTRICT during the IW. The IW is to occur within ten (10) days of Substantial Completion of the Work as defined by the Contract, again predicated upon the Contractor's timely initiation of a request for the IW. At its option, DISTRICT may conduct the IW with its Field Inspector.

14.12.11 Contractor shall endeavor to address and complete as many items as possible noted on the Checklist either during the IW itself, or thereafter for a period of fifteen (15) days from the date of the IW.

14.12.12 No later than fifteen (15) days following the scheduled IW, Contractor shall again initiate and request a second walkthrough of the Project with DISTRICT. The purpose of this second walkthrough is to identify which items remain to be performed from the IW Checklist and to supplement that list as necessary (based, for example, upon work which may have been damaged as a result of the Contractor's performance of completion of items contained on the IW Checklist) and for the purpose of developing a joint Final Punchlist.

14.12.13 The intent of this section is for DISTRICT and the Contractor to cooperate to develop a Final Punchlist to be completed no later than thirty (30) days from the date of reaching Substantial Completion of the construction services purchase as defined in the Contract.

14.12.14 In no event may the Contractor request payment of final retainage under §218.735(7)(d) Florida Statutes until the Contractor considers the Final Punch list to be 100% complete.

14.12.15 Contractor agrees to complete the Final Punchlist items within forty-five (45) days of the date of its issuance by DISTRICT.

14.12.16 Contractor acknowledges and agrees that no item contained on the Final Punchlist shall be considered a warranty item until such time as (a) the Final Punchlist is 100% complete, and (b) DISTRICT has been able to operate or utilize the affected punchlist item for an additional period of fifteen (15) days.

14.12.17 Contractor acknowledges and agrees that DISTRICT may, at its option, during performance of the Work and

prior to Substantial Completion, issue lists of identified non-conforming or corrective work for the Contractor to address. The intent of any such DISTRICT generated lists prior to Substantial Completion is to attempt to streamline the punchlist process upon achieving Substantial Completion, and to allow for the Contractor to address needed areas of corrective work as they may be observed by DISTRICT during performance of the Work.

14.12.18 Contractor acknowledges and agrees that in calculating 150% of the amount which may be withheld by DISTRICT as to any Final Punchlist item for which a good faith basis exists as to it being complete, as provided for by §218.735(7)(d) Florida Statutes, DISTRICT may include within such percentage calculation its total costs for completing such item of work, including its administrative costs as well as costs to address other services needed or areas of work which may be affected in order to achieve full completion of the Final Punchlist item. Such percentage shall in no event relate to the schedule of value associated with such Work activity, but rather total costs are based upon the value (i.e. cost) of completing such Work activity based upon market conditions at the time of Final Punchlist completion.

14.13 REDUCTION OF RETAINAGE PROCEDURES:

14.13.1 Contractor may request a reduction of retainage as provided for by §218.735(7)(8) Florida Statutes. The term "Fifty Percent Completion" as contained in §218.735(7)(8)(b) Florida Statutes shall be defined as follows, in lieu of any other definition:

14.13.2 "Fifty Percent Completion" of the Work is defined as that point in time where 50% of the overall value of Work items incorporated and which shall remain in place subsequent to final completion of the Work have been completed, based upon the schedule of values contained in the Contract. As such, and by way of example, the value of Contractors mobilization, general conditions, supervision or like items which do not involve permanent incorporation of Work do not apply to the determination of "Fifty Percent Completion" of the Work for purposes of establishing entitlement to a reduction of retainage.

14.13.3 With regard to any contract for construction services, a local governmental entity may withhold from each progress payment made to the contractor an amount not exceeding 10 percent of the payment as retainage until 50-percent completion of such services.

14.13.4 After 50-percent completion of the construction services purchased pursuant to the contract, the local governmental entity must reduce to 5 percent the amount of retainage withheld from each subsequent progress payment made to the contractor. For purposes of this subsection, the term "50-percent completion" has the meaning set forth in the contract between the local governmental entity and the contractor or, if not defined in the contract, the point at which the local governmental entity has expended 50 percent of the total cost of the construction services purchased as identified in the contract together with all costs associated with existing change orders and other additions or modifications to the construction services provided for in the contract. However, notwithstanding this subsection, a municipality having a population of 25,000 or fewer, or a county having a population of 100,000 or fewer, may withhold retainage in an amount not exceeding 10 percent of each progress payment made to the contractor until final completion and acceptance of the project by the local governmental entity.

14.13.5 After 50-percent completion of the construction services purchased pursuant to the contract, the contractor may elect to withhold retainage from payments to its subcontractors at a rate higher than 5 percent. The specific amount to be withheld must be determined on a case-by-case basis and must be based on the contractor's assessment of the subcontractor's past performance, the likelihood that such performance will continue, and the contractor's ability to rely on other safeguards. The



contractor shall notify the subcontractor, in writing, of its determination to withhold more than 5 percent of the progress payment and the reasons for making that determination, and the contractor may not request the release of such retained funds from the local governmental entity.

14.13.6 After 50-percent completion of the construction services purchased pursuant to the contract, the contractor may present to the local governmental entity a payment request for up to one-half of the retainage held by the local governmental entity. The local governmental entity shall promptly make payment to the contractor, unless the local governmental entity has grounds, pursuant to paragraph (f), for withholding the payment of retainage. If the local governmental entity makes payment of retainage to the contractor under this paragraph which is attributable to the labor, services, or materials supplied by one or more subcontractors or suppliers, the contractor shall timely remit payment of such retainage to those subcontractors and suppliers.

14.13.7 This section does not prohibit a local governmental entity from withholding retainage at a rate less than 10 percent of each progress payment, from incrementally reducing the rate of retainage pursuant to a schedule provided for in the contract, or from releasing at any point all or a portion of any retainage withheld by the local governmental entity which is attributable to the labor, services, or materials supplied by the contractor or by one or more subcontractors or suppliers. If a local governmental entity makes any payment of retainage to the contractor which is attributable to the labor, services, or materials supplied by one or more subcontractors or suppliers, the contractor shall timely remit payment of such retainage to those subcontractors and suppliers.

14.13.8 This section does not require the local governmental entity to pay or release any amounts that are the subject of a good faith dispute, the subject of a claim brought pursuant to s. [255.05](#), or otherwise the subject of a claim or demand by the local governmental entity or contractor.

14.13.9 The time limitations set forth in this section for payment of payment requests apply to any payment request for retainage made pursuant to this section.

14.13.10 Paragraphs 14.13.3 through 14.13.6 do not apply to construction services purchased by a local governmental entity which are paid for, in whole or in part,

with federal funds and are subject to federal grantor laws and regulations or requirements that are contrary to any provision of the Local Government Prompt Payment Act.

14.13.11 This subsection does not apply to any construction services purchased by a local governmental entity if the total cost of the construction services purchased as identified in the contract is \$200,000 or less.

14.13.12 All payments due under this section and not made within the time periods specified by this section shall bear interest at the rate of 1 percent per month, or the rate specified by contract, whichever is greater.

ARTICLE 15 – SUSPENSION OF WORK AND TERMINATION

15.1 DISTRICT MAY SUSPEND/STOP WORK:

15.1.1 The DISTRICT may, at any time and without cause, suspend the WORK or any portion thereof for a period of not more than ninety days by notice in writing to CONTRACTOR and EOR which shall fix the date on which WORK shall be resumed. CONTRACTOR shall resume the WORK on the date so fixed. CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension if CONTRACTOR makes an approved claim therefore as provided in Articles 11 (Change of Contract Price) and 12, (Change of Contract Time).

15.1.2 THE DISTRICT MAY STOP WORK: The DISTRICT REPRESENTATIVE may stop the Work or any portion thereof when it has been determined that the Contractor is not complying with the Drawings or Specifications or the intent thereof. The Stop Work order may be verbal and the CONTRACTOR shall cease work immediately except for leaving the Work area in a safe and acceptable condition. A verbal Stop Work order shall be confirmed in writing. The CONTRACTOR shall not be allowed an increase in the contract price or an extension of the Contract time during the Stop Work period. A Start Work order may be verbal and shall be confirmed in writing.

15.2 DISTRICT MAY TERMINATE FOR CAUSE:

15.2.1 Upon the occurrence of any one or more of the following events:

15.2.1.1 If CONTRACTOR commences a voluntary case under any chapter of the Bankruptcy Code (Title 11, United States Code), as now or hereafter in effect, or if CONTRACTOR takes any equivalent or similar action by filing a petition or otherwise under any other federal or state law in effect at such timing relating to the bankruptcy or insolvency;

15.2.1.2 If a petition is filed against CONTRACTOR under any chapter of the Bankruptcy Code as now or hereafter in effect at the time of filing, or if a petition is filed seeking any such equivalent or similar relief against CONTRACTOR under any other federal or state law in effect at the time relating to bankruptcy or insolvency;

15.2.1.3 If CONTRACTOR makes a general assignment for the benefit of creditors;

15.2.1.4 If a trustee, receiver, custodian or agent of CONTRACTOR is appointed under applicable law or under contract, whose appointment or authority to take charge of property of 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 CONTRACTOR'S creditors;

15.2.1.5. If CONTRACTOR admits in writing an inability to pay its debts generally as they become due;

15.2.1.6 If CONTRACTOR fails to perform the WORK in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 2.6 as revised from time to time);

15.2.1.7 If CONTRACTOR disregards Laws or Regulations of any public body having jurisdiction;

15.2.1.8 If CONTRACTOR disregards the authority of EOR; or

15.2.1.9 If CONTRACTOR otherwise violates any provisions of the Contract Documents;

15.2.1.10 In the event of termination, the DISTRICT may take possession of the premises and all materials, tools, and appliances, thereon and finish the Work by whatever method it may deem expedient. In such cases, the Contractor shall only be entitled to receive payment for Work satisfactorily completed prior to the termination date, subject to any setoffs due the DISTRICT in completing the Project and for reimbursement of damages incurred. The DISTRICT may take possession of and use any materials, plant, tools, equipment, and property of any kind furnished by Contractor to complete the Work. In such case CONTRACTOR shall not be entitled to receive any further payment until the WORK is finished. If the expense incurred by the DISTRICT to finish the Work (including additional managerial and administrative services, plus the DISTRICT'S direct, indirect and consequential losses), exceeds the unpaid balance on this Contract, the Contractor or the Surety shall pay the difference to



the DISTRICT promptly on demand. The expense incurred by the DISTRICT as herein provided, and the damage incurred through the Contractor's default, shall be certified by the Project Manager. The Contractor shall be responsible for both liquidated damages attributable to delay and for excess completion costs. The liability of the Contractor and its surety or sureties for such damages and costs is joint and several. The obligations of the Contractor and his surety with respect to the warranty and maintenance shall remain in full force and effect for the portion of the Work completed by the Contractor and shall not expire until the expiration of the prescribed time period measured from the final acceptance of the project in its entirety. These clauses shall survive the termination of this Contract. If the DISTRICT makes a determination pursuant to this Contract to hold the Contractor in default and terminate the Contract for cause and it is subsequently determined that any such determination was improper, unwarranted, or wrongful, then any such termination shall be deemed for all purposes as a termination without cause as described below. The Contractor agrees that it shall be entitled to no damages, allowances or expenses of any kind other than as provided in this Agreement in connection with such termination, and does expressly waive, in the event of termination, any and all claims for consequential damages, loss of bonding capability, destruction of business, unabsorbed home office overhead, lost profit and the like.

15.2.2 Where CONTRACTOR'S services have been so terminated by the DISTRICT, the termination shall not affect any rights or remedies of the DISTRICT against CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due CONTRACTOR by the DISTRICT shall not release CONTRACTOR from liability.

15.3 DISTRICT MAY TERMINATE WITHOUT CAUSE:

15.3.1 The DISTRICT may terminate this Contract without cause by giving seven (7) days prior written notice to the Contractor, and in such event, the DISTRICT shall pay the CONTRACTOR for that portion of the Contract Sum, less the aggregate of previous payments, allocable to the WORK completed as of the Date of Termination, plus reasonable termination expenses. The DISTRICT also shall reimburse the CONTRACTOR for all costs necessarily incurred for organizing and carrying out the stoppage of the WORK and paid directly by the CONTRACTOR, not including overhead, general expenses or profit. The DISTRICT shall not be responsible to reimburse the CONTRACTOR for any continuing contractual commitments to subcontractors or material men or for penalties or damages for canceling such contractual commitments, (with the exception that the DISTRICT shall reimburse the CONTRACTOR for major materials or equipment purchased before termination if the CONTRACTOR can show proof of said purchases prior to notice of termination) inasmuch as the CONTRACTOR shall make all subcontracts and other commitments subject to this provision. In the event of termination by the DISTRICT, the DISTRICT may require the CONTRACTOR promptly to assign to it all or some subcontracts, construction, plant, materials, tools, equipment, appliances, rental agreements, and other commitments which the DISTRICT, in its sole discretion, chooses to take by assignment, and in such event the CONTRACTOR shall promptly execute and deliver to the DISTRICT written assignments of the same.

15.4 REMOVAL OF EQUIPMENT DUE TO TERMINATION:

15.4.1 Removal of Equipment: In the case of termination of this Contract before completion, for any cause whatever, the CONTRACTOR, if notified to do so by the DISTRICT'S PROJECT MANAGER, shall promptly remove any part or all of this equipment and supplies from the property of the DISTRICT. Should the CONTRACTOR not remove such equipment and supplies, the DISTRICT shall have the right to remove them at the

expense of the CONTRACTOR. Equipment and supplies shall not be construed to include such items for which the CONTRACTOR has been paid in whole or in part.

15.5 CONTRACTOR MAY STOP WORK OR TERMINATE:

15.5.1 If, through no act or fault of CONTRACTOR, the WORK is suspended for a period of more than ninety (90) days by the DISTRICT or under an order of court or other public authority, or EOR fails to act on any Application for Payment within thirty (30) days after it is submitted, or the DISTRICT fails for sixty (60) days to pay CONTRACTOR any sum finally determined to be due, then CONTRACTOR may, upon seven (7) days written notice to the DISTRICT and EOR, terminate the Contract and the DISTRICT shall pay the CONTRACTOR for that portion of the Contract Sum, less the aggregate of previous payments, allocable to the WORK completed as of the Date of Termination plus reasonable termination expenses. The DISTRICT shall not be responsible to reimburse the CONTRACTOR for any continuing contractual commitments for canceling such contractual commitments inasmuch as the CONTRACTOR shall make all subcontracts and other commitments subject to this provision. The DISTRICT may require the CONTRACTOR promptly to assign to it all or some subcontracts, construction, plant, materials, tools, equipment, appliances, rental agreements, and any other commitments which the DISTRICT, in its sole discretion, chooses to take by assignment, and in such event the CONTRACTOR shall promptly execute and deliver to the DISTRICT written assignments of the same. In addition and in lieu of terminating the Contract, if EOR has failed to act on an Application for Payment or the DISTRICT has failed to make any payment as aforesaid, CONTRACTOR may upon seven days written notice to the DISTRICT and EOR stop the WORK until payment of all amounts then due. The provisions of this paragraph shall not relieve CONTRACTOR of the obligations under paragraph 6.24, Continuing the Work, to carry on the WORK in accordance with the progress schedule and without delay during disputes and disagreements with the DISTRICT.

ARTICLE 16 – DISPUTE RESOLUTION

16.1 GOOD FAITH EFFORT:

16.1.1 Any disputes relating to interpretation of the terms of this Contract or a question of fact or arising under this Contract shall be resolved through good faith efforts upon the part of the CONTRACTOR and the DISTRICT or its Project Manager. At all times, the CONTRACTOR shall carry on the work and maintain its progress schedule in accordance with the requirements of the Contract and the determination of the DISTRICT or its representatives, pending a final resolution of the dispute, including, if necessary, any determination by a Court of competent jurisdiction. Any dispute which is not resolved by mutual agreement of CONTRACTOR and DISTRICT Project Manager shall be decided by the DISTRICT Superintendent or designee who shall reduce the decision to writing. The decision of the DISTRICT shall be final and conclusive unless determined by a court of competent jurisdiction to be fraudulent, capricious, arbitrary, so grossly erroneous as to necessarily imply bad faith, or not be supported by substantial evidence.

16.2 MEDIATION:

16.2.1 Prior to initiating any litigation concerning this Contract, the DISTRICT reserves the right to submit the disputed issue or issues to a mediator for non-binding mediation. The parties shall agree on a mediator chosen from a list of certified mediators available from the Clerk of Court for Martin County. The fee of the mediator shall be shared equally by the parties. To the extent allowed by law, the mediation process shall be confidential and the results of the mediation or any testimony or argument introduced at the mediation shall not be admissible as evidence in any subsequent proceeding concerning the disputed issue.



ARTICLE 17 – MISCELLANEOUS

17.1 GIVING NOTICE:

17.1.1 All notices, requests, consents, and other communications required or permitted under this Contract shall be in writing and shall be (as elected by the person giving such notice) hand delivered by messenger or courier service, telecommunicated, electronically communicated, or mailed by registered or certified mail (postage prepaid) return receipt requested, addressed to:

| <u>As To DISTRICT:</u> | <u>With A Copy To:</u> | <u>CONTRACTOR:</u> |
|--|---|---|
| Director of Facilities Martin County School District 1050 East 10 th St. Stuart, FL., 34996 | Director of Purchasing Martin County School District 2845 S.E. Dixie Hwy, Bldg 7 Stuart, FL., 34997 | Individual or to a member of the firm or to an officer of the corporation for whom it is intended |

17.2 COMPUTATION OF TIME:

17.2.1 When any period of time is referred to in the Contract Documents by days, it shall be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day shall be omitted from the computation.

17.3 NOTICE OF CLAIM:

17.3.1 Should DISTRICT or CONTRACTOR suffer injury or damage to person or property because of any error, omission or act of the other party or of any of the other party's employees or agents or others for whose acts the other party is legally liable, claim shall be made in writing to the other party within a reasonable time of the first observance of such injury or damage. The provisions of this paragraph 17.3 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitations or repose.

17.4 CUMULATIVE REMEDIES:

17.4.1 The duties and obligations imposed by these General Terms & Conditions and the rights and remedies available hereunder to the parties hereto, and, in particular but without limitation, the warranties, guarantees and obligations imposed upon CONTRACTOR by Sections 6, Contractor's Responsibilities, Section 13, Test and Inspections, Correction, Removal or Acceptance of Defective Work, Section 14, Payments to Contractor and Completion, and Section 15, Suspension of work and Termination and all of the rights and remedies available to the DISTRICT and EOR thereunder, 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 shall be as effective as if repeated specifically in the Contract Documents in connection with each particular duty obligation, right and remedy to which they apply. All representations warranties and guarantees made in the Contract Documents shall survive final payment and termination or completion of the Contract.

17.5 ACCIDENT AND PREVENTION:

17.5.1 The safety provisions of applicable laws and building and construction codes shall be observed and the Contractor shall take or cause to be taken such additional safety and health measures as the Local Public Agency involved may determine to be reasonably necessary. Machinery, equipment and all hazards

shall be guarded in accordance with the safety provisions of the "Manual of Accident Prevention in Construction" as published by the Associated General Contractors of America, Inc. to the extent that such provisions are not in conflict with applicable laws. The Contractor shall maintain an accurate record of all cases of death, occupational disease, or injury requiring medical attention or causing loss of time from WORK, arising out of and in the course of employment on WORK under the Contract. The Contractor shall promptly furnish the Local Public Agency with reports concerning these matters.

17.6 FLORIDA PRODUCTS AND LABOR:

17.6.1 The CONTRACTOR'S attention is called to Section 255.04, Florida Statutes, which requires that on public building contracts, Florida products and labor shall be used wherever price and quality are equal.

17.6.2 255.099 Preference to State Residents.—

(1) Each contract for construction that is funded by state funds must contain a provision requiring the contractor to give preference to the employment of state residents in the performance of the work on the project if state residents have substantially equal qualifications to those of nonresidents. A contract for construction funded by local funds may contain such a provision.

(a) As used in this section, the term "substantially equal qualifications" means the qualifications of two or more persons among whom the employer cannot make a reasonable determination that the qualifications held by one person are better suited for the position than the qualifications held by the other person or persons.

(b) A contractor required to employ state residents must contact the Department of Economic Opportunity to post the contractor's employment needs in the state's job bank system.

(2) No contract shall be let to any person refusing to execute an agreement containing the provisions required by this section. However, in work involving the expenditure of federal aid funds, this section may not be enforced in such a manner as to conflict with or be contrary to federal law prescribing a labor preference to honorably discharged soldiers, sailors, or marines, or prohibiting as unlawful any other preference or discrimination among the citizens of the United States.

17.6.3 255.0991 Contracts For Construction Services; Prohibited Local Government Preferences.—

(1) For purposes of this section, the term:

(a) "Competitive solicitation" has the same meaning as in s. 255.248.

(b) "State-appropriated funds" means all funds appropriated in the General Appropriations Act, excluding federal funds.

(2) For a competitive solicitation for construction services in which 50 percent or more of the cost will be paid from state-appropriated funds which have been appropriated at the time of the competitive solicitation, a state college, county, municipality, school district, or other political subdivision of the state **may not use a local ordinance** or regulation that provides a preference based upon:

(a) The contractor's maintaining an office or place of business within a particular local jurisdiction;

(b) The contractor's hiring employees or subcontractors from within a particular local jurisdiction; or

(c) The contractor's prior payment of local taxes, assessments, or duties within a particular local jurisdiction.

(3) For any competitive solicitation that meets the criteria in



subsection (2), a state college, county, municipality, school district, or other political subdivision of the state shall disclose in the solicitation document that any applicable local ordinance or regulation does not include any preference that is prohibited by subsection (2).

(4) Except as provided in subsection (2), this section does not prevent a state college, county, municipality, school district, or other political subdivision of the state from awarding a contract to a contractor in accordance with applicable state laws or local ordinances or regulations.

17.6.4 255.20 Specification of State-Produced Lumber.

(3)(a) All county officials, boards of county commissioners, school boards, city councils, city commissioners, and all other public officers of state boards or commissions that are charged with the letting of contracts for public work, for the construction of public bridges, buildings, and other structures must specify in the contract lumber, timber, and other forest products produced and manufactured in this state, if wood is a component of the public work, and if such products are available and their price, fitness, and quality are equal.

(b) This subsection does not apply:

1. To plywood specified for monolithic concrete forms.
2. If the structural or service requirements for timber for a particular job cannot be supplied by native species.
3. 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.

17.7 EMPLOYEES:

17.7.1 All labor described in these specifications or indicated on the Drawings and the WORK specified or indicated shall be executed in a thoroughly substantial and workmanlike manner by mechanics skilled in the applicable trades.

17.7.2 Any person employed on the WORK who fails, refuses or neglects to obey the instructions of the CONTRACTOR in anything relating to this WORK or who appears to the DISTRICT to be disorderly, intoxicated, insubordinate, or incompetent, shall upon the order of the DISTRICT, be at once discharged and not again employed in any part of the WORK. Any interference with, or abuse or threatening conduct toward the DISTRICT, EOR or their inspectors by the CONTRACTOR or his employees or agents, shall be authority for the DISTRICT to annul the Contract and re-let the WORK. No intoxicating substance shall be allowed on the WORK site.

17.8 NON-DISCRIMINATION:

17.8.1 The CONTRACTOR shall not discriminate against employees or applicants for employment because of race, creed, color, religion, sex, age, handicapped status, disabilities, or national origin. The CONTRACTOR shall endeavor to ensure that applicants are employed and that employees are treated during employment, without regard to their race, creed, color, religion, sex, age, handicapped status, or national origin. Such action shall include but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship. The CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause. These provisions apply to all subcontractors and it is the responsibility of the subcontractor compliance.

17.9 DRUG-FREE WORKPLACE:

17.9.1 The DISTRICT requires all prospective contractors to

maintain a drug free work place and have their Drug Free Workplace policy posted in their offices and available for inspection by the DISTRICT.

17.10 PUBLIC ENTITY CRIMES:

17.10.1 Pursuant to F.S. 287.133, as amended: 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 EOR under a Contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in F.S. 287.017 for CATEGORY TWO or higher for a period of 36 months from the date of being placed on the convicted vendor list.

The DISTRICT shall not intentionally award publicly-funded contracts to any contractor who knowingly employs unauthorized alien workers, constituting a violation of the employment provisions contained in U.S.C. Section 1324a(e) [Section 274A9e) of the Immigration and Nationality Act (INA@)]. The DISTRICT shall consider the employment by any contractor of unauthorized aliens a violation of Section 274A(e) of the INA. Such a violation by the Recipient of the employment provisions contained in Section 274A(e) of the INA shall be grounds for unilateral cancellation of this Agreement by the DISTRICT.

17.11 ASSIGNMENT:

17.11.1 This Contract, nor any monies due hereunder, or any part thereof, shall not be assigned, or transferred, by CONTRACTOR, nor shall the DISTRICT be liable to any assignee or transferee, without the written consent of the DISTRICT, to the assignment, or transfer. The DISTRICT shall not release or discharge CONTRACTOR from any obligation hereunder. The DISTRICT shall not approve an assignment or transfer unless the Surety on the Contract Performance and Payment Bonds has informed the DISTRICT in writing that it consents to the assignment or transfer.

17.12 VENUE:

17.12.1 This Contract shall be interpreted as a whole unit and section headings are for convenience only. All interpretations shall be governed by the laws of the State of Florida. In the event it is necessary for either party to initiate legal action regarding this Contract, venue shall be exclusively in the Nineteenth Judicial Circuit for Martin County, Florida, for claims under state law and the Southern District of Florida for any claims which are justiciable in Federal court.

17.13 FUNDING OUT:

17.13.1 Florida School Laws prohibit the Board or its designee from creating obligations on anticipation of budgeted revenues from one fiscal year to another without year-to-year extension provisions in the contracts. It is necessary that fiscal funding out provisions be included in all bids in which the terms are for periods of longer than one year. Therefore, the following funding out provisions are an integral part of this Invitation to Bid and must be agreed to by all CONTRACTORS:

17.13.2 The Board or its designee may, during the contract period, terminate or discontinue the items covered in this bid for lack of appropriated funds upon the same terms and conditions.

17.13.3 Such prior written notice shall state that the lack of appropriated funds is the reason for termination, and

17.13.4 Board agrees not to replace the equipment or services being terminated with equipment and services with



functions similar to those performed by the equipment covered in this bid from another awarded CONTRACTOR in the succeeding funding period.

17.14 DISTRICT PURCHASING CARD:

17.14.1 The School District has authorized the use of a Purchasing Card to expedite small dollar purchases for materials, supplies, and other items needed for daily operations. CONTRACTOR may be presented these credit cards by authorized School District personnel for the above mentioned purchases.

17.14.2 Additionally, The District reserves the right to use the Purchasing Card as an optional method to pay invoices for the project WORK submitted by the CONTRACTOR.

17.15 DEBARMENT:

17.15.1 The Board shall have the authority to debar a person / corporation for cause for consideration or award of future contracts. The debarment shall be for a period commensurate with the seriousness of the causes, generally not to exceed three (3) years. When the offense is shallful or blatant, a longer term of debarment may be imposed, up to an indefinite period.

17.16 REQUIREMENTS FOR PERSONNEL ENTERING DISTRICT PROPERTY:

17.16.1 Possession of firearms shall not be tolerated in or near school buildings. Nor shall violations of Federal or State Laws and any applicable District policy regarding Drug Free Workplace be tolerated. Violators shall be subject to immediate termination.

17.16.2 "Firearm" means any weapon (including a starter gun or antique firearm) which shall, is designed to, or may readily be converted to expel a projectile by the action of an explosive; the frame or receiver of any such weapon; any destructive device; or any machine gun.

17.16.3 No person who has a firearm in their vehicle may park their vehicle on District property. Furthermore, no person may possess or bring a firearm on District property.

17.16.4 If any employee of an independent awarded CONTRACTOR or subcontractor is found to have brought a firearm on District property, said employee must be terminated from the Board project by the independent awarded CONTRACTOR or subcontractor. If the subcontractor fails to terminate said employee, the subcontractor's agreement with the independent awarded CONTRACTOR for the District project shall be terminated. If the independent awarded CONTRACTOR fails to terminate said employee or fails to terminate the agreement with the subcontractor, who fails to terminate said employee, the independent awarded CONTRACTOR's agreement with the District shall be terminated.

17.16.5 CONTRACTORS are advised that they are responsible to ensure that no employee, agent or representative of their company who has been convicted or who is currently under investigation for a crime against children in accordance with section 435.04, Florida Statutes shall enter any school site.

17.17 BACKGROUND INVESTIGATION:

17.17.1 As a part of the Bid evaluation process, the District may conduct a background investigation including a criminal record check of CONTRACTOR's officers and/or employees, by the Sheriff's Office. The CONTRACTOR's submission of a bid constitutes acknowledgement of and consent to such investigation. The District shall be the sole judge in determining the CONTRACTOR's qualifications.

17.18 PRODUCT RECALL:

17.18.1 In the event the awarded CONTRACTOR receives notice that a product delivered by the awarded CONTRACTOR to the District has been recalled, seized or embargoed, and/or has been determined to be misbranded, adulterated, or found to be unfit for human consumption by a packer, processor, subcontractor, retailer, manufacturer, or by any State or Federal regulatory agency, the awarded CONTRACTOR shall notify the District's Purchasing Department within two business days of receiving such notice. The District's acceptance or failure to reject the affected product as non-conforming shall not in any way impact, negate, or diminish the awarded CONTRACTOR's duty to notify the District's Purchasing Department that the affected product has been recalled, seized or embargoed, and/or has been determined to be misbranded, adulterated, or found to be unfit for human consumption. The form and content of such notice to the District shall include the name and description of the affected product; the approximate date the affected product was delivered to the District; the bid number; and relevant information relating to the proper handling of the affected product and/or proper disposition of the affected product by the District, if necessary to protect the health, welfare, and safety of District students or employees; and any health hazards known to the awarded CONTRACTOR which may be caused or created by the affected product.

17.18.2 The awarded CONTRACTOR shall, at the option of the Purchasing Department, either reimburse the purchase price or provide an equivalent replacement product at no additional cost to the District. Unless it was absolutely necessary for the District to dispose of the affected product, the awarded CONTRACTOR shall be responsible for removal and/or replacement of the affected product within the time specified by the District, without causing significant inconvenience to the District.

17.18.3 At the option of the District, the awarded CONTRACTOR may be required to reimburse storage, disposal and/or handling fees to be calculated from time of delivery and acceptance to actual removal or disposal. The awarded CONTRACTOR shall bear all costs associated with the removal and proper disposal of the affected product. The failure to reimburse the purchase price and storage and/or handling fees or to remove and/or replace the affected product with an equivalent replacement within the time specified by the District, without causing significant inconvenience to the District shall be considered a default.



SECTION V SPECIAL CONDITIONS

5.1 QUALIFICATIONS OF BIDDERS

This ITB shall be awarded only to a responsive and responsible Bidder, qualified to provide the work specified. The Bidder should submit the following information with their bid response package to be considered responsive in order for the District to fully evaluate the firm's qualifications. Failure to fully submit the requested information may result in the bid response being considered non-responsive.

- A. No bid will be accepted from, nor will any contract be awarded to, any person who is in arrears to the District, upon any debt or contract, or who has defaulted, as surety or otherwise, upon any obligation to the District, or who is deemed irresponsible or unreliable by the Martin County School Board in its sole discretion.
- B. Firm must provide a minimum of three (3) satisfactory references of similar accounts and size within the past five (5) years; one (1) similar reference must be from a Government entity or School District (public sector entity) within the state of Florida; and provide details of scope of work, location, date of service, names, addresses and phone numbers of owners. Firm shall not include Martin County School District as a reference.
- C. Firm must provide proof of a State of Florida Plumbing Contractors license (Registered in Martin County according to Florida State Statutes, Chapter 489, or contiguous of Martin County). These licenses must be valid at the time of the bid opening and during the term of the contract, and must be registered with the State of Florida DBPR Construction Industry Licensing Board. Copies of all applicable certificates, registrations and licenses must be submitted with the Bid and must be in the name of the Bidder shown on the Signature of Bid Form.
- D. Firm must provide proof that their firm is registered with the Division of Corporations for the State of Florida.
- E. Firm must complete the enclosed questionnaire, which will be used to evaluate capabilities to perform the work during the contract period. The Bidder's Qualification's Questionnaire must be completed and contain sufficient and specific information which directly responds to the request. MCSD reserves the right to reject non-responsive bids, which do not provide sufficient information to evaluate the qualifications of the Contractor and where information provided does not demonstrate a proven past record (such as negative references, failure to complete projects, not having the capability to fully perform the contract requirements and lacking the integrity and reliability which will assure good-faith performance, etc.).
- F. Firm must have an established / maintained operational service location contiguous of Martin County, as their base location to service this contract, for the licensed, Plumbers specializing in repair and maintenance.
- G. A licensed Journeyman Plumber must be on each job at all times. A Journeyman plumber is required to have five (5) year's comparable commercial plumbing experience with a current plumbing license and must present card, if requested by the District. The licensed Journeyman shall also represent as the assigned Supervisor for the District account. This assigned Supervisor will be responsible for overseeing all work performed. Contractor must provide trained personnel with adequate experience and skills to perform the work. Apprentices/helpers/laborers may be employed provided they work under the direct supervision of a qualified journeyman in accordance with trade regulations. Include qualifications on the Bidder's Qualification's Questionnaire in Section VII.
- H. Contractor will be required to establish a written quality control program to insure requirements of the contract are provided such as: record of response performance, total elapsed time from receipt of call to arrival at the job site, number of trips to the job site taken to complete each repair/installation, the number of mechanics/technicians and/or helpers required to complete each repair.



- I. Contractor shall comply with Business Tax Receipt requirements for their business location, if required. A copy of the business tax receipt or proof of exemption must be included with the submittal package.

5.2 MEETING SCHEDULE

- A. **Questions Deadline:** The Purchasing Department will receive written requests for clarification and inquiries concerning the meaning or interpretation of this ITB. Questions shall be emailed to bids@martinschools.org with reference to the ITB number in the subject for faster recognition. Only questions answered by formal written Addenda issued by the MCSD Purchasing Department shall be binding. Oral and other interpretations or clarifications shall be without legal effect. The District will respond to written inquiries, if received by no later than 2:00pm on September 29, 2021. The District shall record its responses to inquiries and any supplemental instructions in the form of a written addendum. If addenda are issued, the District **shall make every attempt to issue such** addenda at least seven (7) calendar days before the date fixed for receiving the bids.
- B. **Bid Opening:** Firms desiring to provide the goods and services described above shall submit one (1) complete electronic submittal, contained in one (1) file, PDF format preferred, submitted electronically through www.DemandStar.com or bids@martinschools.org containing all of the required information on the proper forms as identified in Section VII, **no later than 2:00pm, October 13, 2021.** Bids will be opened and read in public via Zoom teleconference. It is the sole responsibility of the Bidder to assure that bids are received no later than the specified time and date.
- C. **Kick-Off Meeting:** The District will schedule a kick-off meeting to initiate the expected services, introduce the project team to ensure the scope, goals, budget, timeline, and reporting through-out the contract period within fifteen (15) business days after Notice of Award.

5.3. BUSINESS OPERATIONS

- A. **Regular Working Hours:** Unless otherwise directed by the Facilities/Maintenance Directors; or his designee, the successful Contractor(s) shall insure that the following schedule is adhered to and services as required must be scheduled to insure that all work is during normal business hours and must be between the hours of 7:00 AM and 4:00 PM, will be paid at the regular specified hourly rate. Response time for Routine Hours range from immediate (on-site within 4 hours from notice of call) to 24 hours (next day service). Department will convey the work schedule at time of order placement. Contractor's service representative shall respond back to all requests for repair by phone within sixty (60) minutes.
- B. **Overtime Working Hours:** Overtime hours will be from 4:01pm to 6:59am Monday through Friday, including weekends, District observed holidays, and must be approved by the Project Manager prior to commencement of work actually being performed. Failure to obtain prior approval may result in all work being paid at routine rates. No additional expenses shall be granted for work performed after hours without prior approval. Contractor is not permitted to perform work on any District observed holiday, without the written consent of the District Project Manager. Detailed work schedule shall be determined in advance.
- C. **Emergency Repairs:** The majority of the work will be done during regular District business hours. Nonetheless, there may be emergencies which require projects to be completed after hours, on weekends or during holidays. In emergency situations, the requirement to provide a written estimate / work order may be waived. Response time for Emergency Hours range from immediate (on-site within 2 hours from notice of call) to 8 hours and shall be defined as regular hours. Awardee must be available by phone 24 hours per day, seven (7) days per week in the event of such an emergency request. Once contacted, the awardee shall meet with the District Supervisor assigned and review the scope of the work required. Awardee and District personnel shall come to a mutually agreed-upon work schedule at time of order placement. **Contractor's service representative shall respond back to all requests for repair by phone within thirty**



(30) minutes. Emergency hours are reserved for Emergency Repairs that are an immediate threat to the public health, welfare, or safety only. OT rates for emergency only apply during specified overtime hours.

D. **Inclement Weather Conditions:** Upon approval by the Facilities Director or designee, the Contractor may cease operations of services during inclement weather conditions.

E. **Observed Holidays:** The District also schedules non-work days throughout the calendar year. The Facilities/Maintenance Directors or designee will notify the awarded Contractor of any non-work days that may affect the work schedule:

- | | |
|------------------------------|------------------------|
| New Year's Day | Martin Luther King Day |
| President's Day | Spring Break |
| Memorial Day | Independence Day |
| Labor Day | Veteran's Day |
| Thanksgiving Day & Day After | Christmas Break |

F. **Schedules:** All schedules and the necessary arrangements to implement the scope of work projects must be made with the review and approval of the Supervisor assigned.

- All requested work must be completed within the timeframe and the written project schedule agreed upon between the awardee and the District Supervisor assigned. Additional time may be approved, if necessary, when requested, in writing, by the awardee.
- Each project must be completed as quickly as reasonably possible, not to exceed the number of calendar days set forth in the "Notice to Proceed." The start date of each project shall be the date the "Notice to Proceed" has been issued. The completion date shall be the date mutually agreed upon between the District Supervisor assigned and the awardee prior to issuing the "Notice to Proceed."

5.4 BADGE POLICY

This work is to take place on an active campus with active buildings around the area of work. All personnel working onsite with this project must have & wear MCSD badge at all times on the site. The Awarded Contractor must apply for the MCSD Badge and pay for all associated costs for each individual working on the project.

5.5 SUBCONTRACTING

The Contractor shall perform the work with its own employees under its immediate supervision and shall not subcontract any portion of the work unless approved in writing by the authorized representative of the Maintenance or Facilities Services Department.

On occasion, the use of subcontracted services may be required. This is for service that is needed on occasion, not in the regular course of plumbing services. Subcontracted services for repairs, installations, and emergency services for plumbing services are to be billed at net cost, with prior approval by District designee. A maximum of 20% mark-up will be allowed. A mark-up on sales tax will not be allowed. The Contractor's invoices will clearly show the description of the subcontracted service, cost, and percent mark-up cost. A copy of the Subcontractor's invoice will be submitted with the Contractor's invoice. Include the name of the person to be contacted, telephone number and extent of work to be performed. This information is to be submitted with bid response. If Contractor should need to change subcontractor information, changes are subject to the approval by the District. The District reserves the right to reject a bid of any bidder if the bid names a subcontractor who has previously failed in the proper performance of an award or failed to deliver on time contract of a similar nature, or who is not in a position to perform properly under this award.

5.6 AWARD METHOD

The District reserves the right to award on an all or none basis or to make a multiple award to the lowest and best responsive responsible bidder, if in the best interest of the District, and as follows:



The District intends to award this bid to a Primary bidder. Award of the primary will be determined in order of responsiveness, delivery, and service proposed, along with bidder's qualifications, adequate organization, and personnel to ensure prompt and efficient performance of work to the District. After the bid has been awarded, the Primary bidder will be used in every instance of ordering services as long as their firm is capable of delivering the services in question within the time specified in this bid. If the Primary bidder is not able to deliver the services in question within the specified time, the District reserves the right to contact the secondary bidder with the subsequent lowest responsive responsible, and /or contact the tertiary bidder with the subsequent lowest responsive responsible bid accordingly.

5.7 PERFORMANCE

Throughout the contract period the Consultant(s) performance will be monitored by District staff. If performance fails to meet the standards specified or noncompliance with the conditions, terms, specifications and requirements of the ITB and receives an unacceptable rating, the District may without cause and without prejudice to any other right or remedy, terminate the contract whenever the District determines that such termination is in the best interest of the District. Vendor's receiving an unacceptable rating shall be served by written notice by the Procurement Department. The District shall be the sole judge of nonperformance.

5.8 UNIT PRICES

Unit prices must be inclusive of response time, travel time from portal to portal, time for the preparation of estimates, supplying or acquiring materials, attending mandatory pre-job conferences, the administration of the contract by the awardee or the processing of submittals, invoices or paperwork. Separate billing for these types of labor will NOT be considered with the exception of the following:

- Awardee shall obtain permits in the scope of this work. Awardee shall handle the permit application process through the District Building Official.
- Re-Inspection Fees: Non-Conforming Work and Re-inspection Fees:

5.9 UTILITIES

The awardee is responsible for contacting Sunshine State One Call of Florida at (800) 432-4770, www.callsunshine.com, for member public utility locations and must repair all member public utility or service lines damaged by their repairs immediately upon notice of such damage. Failure to respond immediately for such repairs will bring back charges to the awardee for all costs to District to repair damaged lines. The District Supervisor assigned will work with the awardee when it is necessary to identify District-owned overhead service lines, repairs to which will NOT be the responsibility of awardee.

5.10 STANDARDS/REGULATIONS

- A. Manufactured items, fabricated assemblies and on-site contractor services shall comply with all applicable federal, state and local requirements. For on-site contractor services, the District reserves the right to request documentation of contractor compliance with OSHA standards to include but not be limited to: required employee safety & health training, written safety and health programs, provision of required personal protective equipment (PPE), and/or provision and use of required atmospheric monitoring equipment. Hazardous chemicals must be accompanied by a Material Safety Data Sheet (MSDS), as required by the Occupational Safety and Health Act (OSHA) of 1970; as amended, and any other applicable federal, state and local regulations.
- B. Equipment must meet all State and Federal safety regulations for grounding of electrical equipment. The Martin County School District, Florida intends to purchase plumbing materials and services delivered and installed in accordance with the Uniform Plumbing Code, NFPA, National Fire Protection Association codes and standards, local and state regulations, and as requested by the Maintenance Services Department or Facilities Services Department.



5.11 **IDENTIFICATION**

The Contractor, Subcontractors, and their employees are required to have visible, personal identification and the vendor's company name displayed on their shirts. They will also be required to wear attire appropriate for a school environment: i.e., shirt, pants, & shoes. Clothing displaying nudity, obscene symbols, or pro-drug slogans is prohibited. The Contractor, Subcontractors, and all employees of same must check in and out at the main office before starting work during normal school hours. Before or after normal school hours, contact the on-site custodial staff.

5.12 **CONDUCT**

The Contractor acknowledges and understands that the job is being performed on public property owned by the MCSD, which may at various times during the completion of the job be occupied by students, teachers, parents, and school administrators. Accordingly, in order to secure the property, and otherwise comply with applicable law, the Contractor agrees to the following provisions, and also agrees that the failure to comply with any of these provisions may result in the termination of this Contract.

- The Contractor shall immediately remove from the job site, for the duration of the job, any person making an inappropriate religious, racial, sexual or ethnic comment, statement or gesture toward any other individual.
- The Contractor, Subcontractors, and their employees will refrain from using foul, abusive or profane language on school district property. Smoking/tobacco, firearms/weapons and illegal drugs are prohibited on school district property, including all buildings and grounds.
- The Contractor shall enforce strict discipline and good order among their employees at all times. Contractor's personnel shall have absolutely no contact with students or staff, other than administrative personnel or designated representatives, with the exception of emergency situations.
- No radios are allowed on the job site.

5.13 **PROTECTION OF PROPERTY**

The successful Contractor shall at all times guard against damage or loss to the property of the District or that of other vendors or contractors, and shall be held responsible for replacing or repairing any such loss or damage. The District may withhold payment or make such deductions, as deemed necessary, to ensure reimbursement or replacement for loss or damage to property through negligence of the successful Contractor or their agents.

The successful Contractor shall be responsible for the protection of property in the areas in the adjacent vicinity of the project; and for the protection of his own equipment, supplies, materials and work, against any damage resulting from the elements (such as flooding, rainstorms, wind damage, or other acts of God) or vandalism.

5.14 **TERMINATION CLAUSES**

A. The Contract may be terminated as follows:

1. By the District, at its convenience pursuant to paragraph B, below;
2. By the District for Contractor's failure to adequately perform the Contract, pursuant to paragraph C, below;
3. By the mutual Contract of the parties; or as may otherwise be provided below.
4. In the event of the termination of the Contract, any liability of one party to the other arising out of any Services rendered, or for any act or event occurring prior to the termination, shall not be terminated or released.

B. Termination for District's Convenience: The District, by written notice, shall have the right to terminate and cancel the Contract, without the Contractor being at fault, for any cause or for its own convenience, and require the Contractor to immediately stop work. In such event, the



District shall pay the Contractor for the work actually performed. The District shall not be liable to the Contractor for any other costs, charges, or expenses, including but not limited to, prospective profits and overhead on work not performed.

- C. Termination for Contractor’s Failure to Perform:** In addition to any other termination provisions that may be provided in the Contract, the District may terminate the Contract in whole or in part if the Contractor makes a false Invoice or fails to perform any obligation under the Contract and does not remedy the failure within ten (10) calendar days after receipt by the Contractor of written demand from the District to do so, unless, however, the nature of the failure is such that it cannot, in the exercise of reasonable diligence, be remedied within ten (10) calendar days, in which case the Contractor shall have such time as is reasonably necessary to remedy the failure. In the event that the awarded bidder abandons this Contract or causes it to be terminated, awarded bidder shall indemnify the District against loss pertaining to this termination.
- D. Default:** In case of default by the Bidder, the Board may procure the articles or services from other sources and hold the Bidder responsible for any excess costs incurred thereby.
- E. Payment upon Termination:** Upon termination of the Contract, the District shall pay the Contractor for those Services actually rendered and contracted for under the Contract, and those reasonable and provable expenses required and actually incurred by the Contractor for Services prior to the effective date of termination. Where the Contract is terminated for cause by the District, such payment shall be reduced by an amount equal to any reasonable and provable expenses actual incurred by the District as a direct result of the termination.



SECTION VI SCOPE OF WORK

6.1 **WORK OBJECTIVE**

- A. The Martin County School District (hereinafter referred to as "MCSD") is soliciting Licensed Plumbing Contractors to submit bids to purchase plumbing materials and services delivered and installed in accordance with the Uniform Plumbing Code, NFPA (National Fire Protection Association codes and standards), local and state regulations, and OSHA (Occupational Safety Hazards Acts) for plumbing work as requested by the maintenance or Facilities Services Departments in accordance with the project manual specifications.
- B. The work to be performed by the Contractor consists of furnishing all material, plumbing fixtures/ancillary part replacement, labor, supervision, products and tools, travel, fuel supplies and equipment, as required to successfully perform interior and exterior full service plumbing installation and repair on a project by project basis for the MCSD pursuant to the unit prices set forth in this bid. This includes, but is not necessarily limited to, connecting and disconnecting portable classrooms with running water and waste lines; installing sanitary sewer lift stations and/or including catch basins, inspections, adjustments, test, and repairs to keep continuous use and efficiency for the intended purpose, and as follows:
- All materials, preparation and workmanship shall conform to requirements in accordance with trade regulations.
 - Only lead free solder shall be used on potable water lines made of copper. On sanitary waste lines, other types of solder may be used.
 - All repairs and/or installations shall be inspected by the District's Building Official, District Facilities/and or Maintenance Departments.
 - All repairs and/or installations with any noted deficiencies or failed inspection reports must be corrected before invoice(s) for payment will be processed.
 - Manufacturer shall be contacted for all work under warranty by the manufacturer and all work performed must protect the current warranty.
 - For each visit to the job site, the Contractor shall provide a copy of the work order with an update on the disposition of job, i.e., description of work completed, parts on order (include time frame for delivery of parts), date of return to job site, and estimated date for completion of work. This update should be returned to the originator of the work order. This work order should be received the same day as the job site visit.
 - As the Contractor will be performing work at locations that will affect a great number of people, communication on the disposition of work orders is critical to the Maintenance or Facilities Services Department.
 - All repair work shall be permanent.
 - Awardee may be required to repair, alter, remodel, renovate, add to, subtract from or improve any previous repair.
 - Any remaining plumbing materials that were either supplied by District or purchased from the awardee at the conclusion of any particular project remain as District property.
- C. **Past Projects/Types of Work**
- RPZ Repair and Replacement
 - Water Line Pressure Issues – Testing and Troubleshooting
 - Back Flow Valve Repair and Replacement
 - Replacing Main Water Line Valving – Buried and Inside the Buildings



- Emergency Water Line Leak Repairs of All Sizes
- Install New Relief and Water Valves
- Install New Water Fountains
- Repair Water Fountains
- Install and Retrofit New Bottle Filling Water Fountains
- Sewer Drain Issues and Repairs
- Sewer Main Clogs – Jetting Out the Clogs
- Install New Restroom Toilets, Sinks, Urinals, Faucets
- Install Tankless Water Heaters
- Troubleshoot – Repair and Replace Regular Water Heaters
- Repair Vent Stacks
- Replace Vacuum Breakers
- Repair/Replace Interior Hose Bibs
- Replace Water Circulation Pumps on Water Heaters

6.2 INTENT AND INFORMATION

- A. **Inspection of Facilities:** It is the bidder's responsibility to become fully informed as to the nature and extent of the work required and its relation to any other work in the area, including possible interference from other site activities. Thereby, Contractor is responsible for confirming actual site conditions prior to starting work, and assures that the work order produced will be completed as specified. **Any oral explanation provided prior to the bid opening will not be binding.**
- B. **Measurements:** Awarded bidder will be responsible for their own measurements and must submit a firm price accordingly by work order request. There will be no adjustments, for increase or decrease of measurements required for the job. Therefore, the "Total Offer" must be based on accurate measurements by bidders during inspection. Failure to do so will be at the bidder's risk.
- C. **Schedule of Values:** All work for this project, including but not limited to, all profit and overhead, incidentals, all labor, mobilization/demobilization, supervision, testing, machinery, equipment, tools, materials, coordination with utility companies, cleanup and other means of construction necessary to complete the described work in accordance with the specifications, and other contract documents.
- D. Any specific job or work order request that exceeds \$100,000 must have prior Board approval, and is subject to the following, as identified in Section IV:
 - Retainage Procedures;
 - Liquidated Damages;
 - Insurance Requirements.

6.3 WORKMANSHIP

- A. All work shall be performed in a professional manner and shall conform to all applicable District, County, State and Federal Regulations and/or Codes. The Contractor shall also be responsible for obtaining all permits and licenses required to begin work.
- B. Furnish all parts and tools necessary to perform complete maintenance/repair services as specified in a safe manner. The Contractor shall perform repairs requiring an electrician, unless predetermined that the District will perform the plumbing work. Repairs shall include diagnosis, removal and replacement of defective components, as service requires.

6.4 SERVICING PROCEDURES

- A. All schedules must be established in advance and with prior approval. All schedules and the necessary arrangements to implement the scope of work must be mutually reviewed and approved by the Contractor and Project Manager or Designee. Contractor agrees and understands that the contract shall not be construed as an exclusive arrangement and further



agrees that the District may, at any time, secure similar or identical services at its sole option. The Contractor shall endeavor to assign all requested services without the necessity of overtime labor. All repair work to be performed, in the best workmanlike manner, as known to the trade.

- B. The District will contact the Contractor to advise of either regular, OT, or emergency repair services needed. At no cost to the District, the Contractor shall meet with the District representative at the site where work is needed to determine the type of work to be performed. The Project Manager may require the Contractor's representative to attend a meeting prior to the commencement of work at each project. Contractor shall submit a written estimate (work order). This estimate shall include a total firm cost to the District itemized as follows; labor hours, equipment, itemization costs for material/parts, a brief description of the repair work to be done and location of work.
- C. Estimates must be complete and specific with measurements and quantities of time, completion, and materials. If the District is interested in proceeding with the work identified on the Contractor's written estimate, the District Project Manager will sign off on the work order/estimate which shall act as the notice to proceed for commencement of work. (Upon Request, District may request copies of manufacturers list pricing from Contractor's suppliers as proof of material cost).
- D. Upon completion of services, the District reserves the right to request a Supervisor to review the work performed by their technician if deemed necessary. Supervisors review to be at no additional charge to the District and considered part of the contract award. The District's Project Manager reserves the right to request the Contractor to review and provide written acknowledgement/report that work performed has been completed. Contractor's review to be at no additional charge to the District and considered part of the contract award. Contractor shall document any areas of concern that are above and beyond on their report. The report shall be signed by an authorized agent of the firm and submitted to the Project Manager by email address provided to the awarded Contractor.
- E. Contractor must maintain complete and accurate records of all services provided pursuant to the terms of this agreement. All work-repair tickets, service calls, etc. shall be kept in a separate file for the District to be used as a work history for each of the units. Contractor shall establish a written quarterly quality control program to insure requirements of the contract are provided such as: record of response performance, total elapsed time from receipt of call to arrival at the job site, number of trips to the job site taken to complete each repair/installation, the number of mechanics/technicians and/or helpers required to complete each repair, a detailed description of their diagnosis, prognosis, any materials/supplies required, and location of work.
- F. If the Contractor shall be delayed in the completion of its work by reason of unforeseeable causes beyond its control and without fault or negligence, including, but not restricted to, acts of God or neglect of any other contractor, the period herein specified above specified for the completion of delivery shall be extended by such time as shall be approved by the Project Manager or designee.

6.5 EQUIPMENT / MATERIALS / PARTS

- A. All equipment / materials must be new, of current manufacturer and in production at the time of bid opening, and carry standard warranties. All equipment supplied shall contain complete maintenance instructions, operating manuals and parts lists. Equipment / materials may include, but not limited to; press fitting systems, pipe bender, borecope, plumber's tape, wrenches, tape measure, screwdrivers, plastic pipe and tube cutters, and washers, etc.
- B. Responses will be considered only on equipment that can, on short notice, be serviced and maintained by the bidder. The bidder must maintain a normal supply of repair parts and be equipped with personnel and facilities to provide such service as necessary to keep the equipment in operation with a minimum of delay. The District reserves the right to audit and request invoices for cost of materials.



- C. Equipment / Materials may be purchased under this contract at the discretion of the District Department on a cost-plus not to exceed 20% basis. These materials purchased under this contract must be verified by the submission of an itemized list of materials proposed for purchase from the identified source, each unit priced by cost, the total price and the awardee's cost-plus mark-up. Any remaining materials, after project completion, become the property of District. The District Department is under no obligation to purchase materials under this contract if the materials can be purchased on other District contracts. However, if in the best interest of the District, on a project by project basis, the District may exercise the option to directly purchase equipment at District's cost. It will be the District's responsibility to inspect and accept equipment purchased by District. Contractor will only provide the services required to complete the work with the District purchased materials.

6.6 SPECIAL EQUIPMENT

- A. All equipment to be utilized shall conform to standards of the trade and be acceptable by the MCSD. On some jobs, the use of special equipment may be required. This equipment is in addition to any equipment used in the regular course of plumbing work. The following applies to the use of this special equipment.
- B. **Contractor Owned Equipment, including Equipment Operator:** The cost of Contractor owned special equipment will be allowed as an option, the hourly rate shall include the cost of the equipment operator. Indicate on the questionnaire form the type of special equipment owned and the hourly rates for use of this equipment. Written approval from the Maintenance/Facilities representative is required prior to the use of this equipment. Additional equipment that may be purchased by the Contractor after the award of bid may be added to the scope of Contractor owned equipment. Minimum required special equipment shall include a smoke machine for leak test and camera system for video of pipes.
- C. The Contractor's invoices will clearly show the description of specialty Contractor owned equipment used, number of hours or days of active use, and itemized cost.

Example: A drain line cleaning machine will not be approved for a charge for the use of this equipment. It should be regular equipment.

6.7 RENTAL EQUIPMENT

On occasion, the use of special rental equipment may be required. This is for equipment that is used on occasion, not in the regular course of plumbing services. The cost of special rental equipment will be allowed based on the Contractor's cost from the rental facility plus a 10% mark-up. A mark-up on sales tax will not be allowed. Rental is for active use only. Payment for inactive use will not be allowed. Written approval from the Maintenance or Facilities representative is required prior to the use of this equipment. The Contractor's invoices will clearly show the description of rental equipment used, number of hours or days of active use, cost, and percent mark-up cost. A copy of the rental equipment invoice will be submitted with the Contractor's invoice.

6.8 COOPERATION WITH DISTRICT

District reserves the right to supervise all services, repairs and/or installation required under this contract and to provide the requisite parts from District stock. District also reserves the right to have District personnel assist and work together with awardee's personnel when it is deemed in the best interest of District. This Special Condition will NOT void ANY warranty provisions or ITB Specifications stated in this document, including the one-year "on-site" warranty for parts and labor provided by the awardee, while working in cooperation with District authorized personnel.

6.9 WARRANTY

Should any defect in materials or workmanship, excepting ordinary wear and tear, appear during the below stated warranty period, the successful bidder shall repair or replace same at no cost to the District:

- A. **Workmanship:** The successful bidder shall warranty all workmanship/labor for a period of 12 months from date of completion and final acceptance by the Facilities Department designee.



Should any defect in workmanship, excepting ordinary wear and tear, appear during the above stated warranty period, the successful bidder shall repair or replace same at no cost to the District, immediately upon written notice from the Facilities Department Designee.

- B. **Materials:** The successful bidder shall provide full factory warranty on all equipment/materials/parts furnished against defect in materials. The factory warranty shall become effective on the date of delivery and acceptance by the District.

6.10 **INSPECTION and DIRECTION**

- A. The work will be conducted under the general direction of the Project Manager or designee and is subject to inspection to insure compliance with the terms of the bid. The Contractor is not permitted to change any provision of the specification without prior written approval by the Project Manager or designee. Nor shall the presence or absence of the Project Manager or designee relieve the Contractor from any requirements of the bid.
- B. The District's Building Official, Project Manager, or designee will make final inspection of the work covered by this contract when it is completed and finished in all respect in accordance with specifications and must be approved before payment is made. Appointments for the final inspection shall be made one day in advance.

6.11 **PRICING AND INVOICING**

- A. The District requires a firm price for each contract period. Invoices will be checked to confirm compliance with quoted pricing. Failure to hold prices firm through each contract term will be grounds for contract termination.
- B. Each service call shall be invoiced separately. The invoice shall reflect the hourly labor rate and number of hours on-site and a separate itemized listing of the materials. For invoices involving materials, copies of list price/catalog shall be submitted for verification. Failure to supply copies of invoices may result in contract cancellation.
- C. The hourly rate per call, whether equipment is repaired/serviced at the site or the successful contractor's shop, shall remain fixed through the term of the contract. There will be no additional charges for mileage and/or travel time. The first hour of service call may only be charged once per work order, after the initial service call.
- D. All rates quoted shall include travel means, labor and any and all equipment and tools required. All disposal charges should be included in the contractor's overhead. There shall be no charges to and from the District work sites. The District will pay a minimum 1-hour of service for repairs performed. **Contractor shall round to the ½ hour for all work performed in excess of an hourly increment.**

6.12 **SAMPLE FORMS**

The District is hereby requesting sample(s) of the following to be submitted with bid response:

- Work Order/Work-Repair Ticket
- Invoice
- Inspection Report
- Preventative Maintenance / Quality Control Report

6.13 **BOND REQUIREMENTS**

The Successful Contractor shall be required to submit the following Bond requirements after award.

- A. **Bid Bond:** The bond shall be in an amount equal to five percent (5%) of the total amount. The guarantee may be in the form of a Surety Bond with a carrier duly licensed and authorized to do business in the State of Florida, a Cashier's Check or a Certified Check (checks made payable to



District). Purpose of the Bid Bond is to assure the apparent low, responsive and responsible bidder will enter into a contract to provide the described services. Should the Bidder not enter into a contract the Bid Bond shall be retained by the District to defray the additional costs of either awarding to the second low, responsive and responsible Bidder or re-advertise and re-solicit the project.

- B. **Payment & Performance Bonds:** Provide evidence confirming the firm's ability to obtain Payment and Performance Bonds for the construction project as detailed herein. The successful Bidder will be required to furnish payment and performance bonds with a carrier duly licensed and authorized to do business in the State of Florida, equal to one hundred percent (100%) of the total amount of the contract to assure faithful performance and timely payments to all persons providing labor, materials or supplies used in the performance of the work.



**SECTION VII
FORMS**

- 7.1 COVER PAGE CHECKLIST
- 7.2 BID FORM
- 7.3 SCHEDULE OF PRICES
- 7.4 BID BOND
- 7.5 BIDDER'S QUALIFICATION'S QUESTIONNAIRE
- 7.6 SUBCONTRACTOR LIST
- 7.7 TRENCH SAFETY ACT
- 7.8 WARRANTIES
- 7.9 REFERENCE QUESTIONNAIRE
- 7.10 NON-COLLUSIVE AFFIDAVIT
- 7.11 CONFLICT OF INTEREST
- 7.12 DRUG FREE WORKPLACE
- 7.13 PUBLIC ENTITY CRIMES
- 7.14 NO BID



MARTIN COUNTY SCHOOL BOARD

INVITATION TO BID (ITB) NO. 1009-0-2021/LD

DISTRICT PLUMBING SERVICE

PURCHASING DEPARTMENT
2845 SE DIXIE HWY
STUART, FLORIDA, 34997
TELEPHONE (772) 219-1255
EMAIL bids@martinschools.org



SECTION VII
FORMS

- 7.1 COVER PAGE CHECKLIST
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- 7.13 PUBLIC ENTITY CRIMES
- 7.14 NO BID



COVER PAGE CHECKLIST

THIS SHOULD BE THE FIRST PAGE OF YOUR SUBMITTAL

SOLICITATION NAME:

SOLICITATION NO:

COMPANY NAME:

PHONE NO:

- 1. Submit one (1) complete electronic submittal, contained in one (1) file, PDF format preferred, submitted electronically through www.DemandStar.com or bids@martinschools.org containing all of the required information **prior to the Bid deadline**. Bids submitted after the bid deadline shall be retained unopened and deemed non-responsive.
- 2. Bid Form/Schedule of Bid Prices/Bid Submittal Certification: **Carefully read all Bid Documents, and properly complete the Bid Form and execute the certification.** *(Failure to properly complete and sign this document shall cause the Bid submittal to be rejected as non-responsive.)*
- 3. Bid Bond: Include a five percent (5%) Bid Bond. **Failure to provide a Bid guarantee will result in automatic rejection of your Bid.** All required Bonds must be submitted on the DISTRICT'S Bond forms, included in this document. *Failure to properly complete and submit this document using the form provided shall cause the Bid submittal to be rejected as non-responsive.)*
- 4. Bidder's Qualification Questionnaire: **Complete and sign the Bidder's Qualification Questionnaire.** *(Failure to properly complete and sign this document shall cause the Bid submittal to be rejected as non-responsive.)*
- 5. Subcontractor List: **Complete the form.**
- 6. Trench Safety Act: **Complete and sign the Trench Safety Act form.**
- 7. Warranties: **Complete and sign the Warranties form**
- 8. References: **Complete and submit three references on the designated Form.**
- 9. Non-Collusion Affidavit: Sign the Non-Collusion Affidavit and have it notarized.
- 10. Conflict of Interest: Complete and sign the form.
- 11. Drug Free WorkPlace Form: **Sign the Drug Free WorkPlace Form.**
- 12. Public Entity Crime Statement: Sign the Public Entity Crime Statement and have it notarized.
- 13. Proof of Insurance: Include proof of insurance containing **a provision or endorsement that the coverage afforded will not be canceled, reduced in coverage, or renewal refused until at least 30 days' prior written notice has been given to the DISTRICT and additional insured by certified mail. All such insurance required herein (except for worker's compensation and employer's liability) shall name the DISTRICT, and their officers, directors, agents, and employees as "additional insured"**. Attach to the back of your submittal.
- 14. Licenses: **Attach certificate of competency, state registration and any other applicable licenses.** Attach to the back of your submittal.
- 15. **Proof that firm is registered with Florida Division of Corporations (Sunbiz) and Business Tax Receipt, if applicable.**
- 16. **IF "NO BID" is offered, please complete the last section in the Bid Form and return to the Purchasing Department.**



BID FORM

SOLICITATION NAME:

SOLICITATION NO:

Submitted By:

(BIDDER)

Date:

A. SCOPE OF WORK

The scope of work as identified in Section VI, and in accordance with the MCSD Specifications.

B. BIDDER ACKNOWLEDGES

- 1. The undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into an Contract with the DISTRICT to perform and furnish all WORK and deliver all materials in accordance with the bid documents as specified herein for the Contract Price and within the Contract Period indicated in this Bid.
- 2. This Bid will remain subject to acceptance for ninety (90) days after the day of Bid opening. BIDDER will sign and submit the necessary documents required by the DISTRICT within ten (10) days after the date of DISTRICT'S Notice of Award.
- 3. In submitting this Bid, BIDDER represents, as more fully set forth in the Contract, that;

a. BIDDER has examined the Bid Documents, including the following addenda, receipt of which is hereby acknowledged:

| Number | Date | Number | Date | Number | Date |
|--------|------|--------|------|--------|------|
|--------|------|--------|------|--------|------|

b. BIDDER has familiarized itself with the nature and extent of the Bid Documents, locality, and all local conditions and laws and regulations that in any manner may affect cost, progress, performance or furnishing of the WORK. These General Conditions are applicable to all specifications contained in the project manual.

c. BIDDER has given the DISTRICT written notice of all conflicts, errors or discrepancies that it has discovered in the Bid Documents and the written resolution thereof by the DISTRICT is acceptable to BIDDER.

4. BIDDER proposes to furnish the WORK in conformity with the specifications and at the Bid Prices referenced below in the Schedule of Bid Prices. The Bid Prices quoted have been checked and certified to be correct. Said Bid Prices are fixed and firm and shall be paid to BIDDER for the successful completion of its obligation as specified in the Bid Documents.

5. Provide office hours and contact information of staff responsible for coordination of services. _____

Contact Person

Business Address

City, State, Zip Code

Business Phone No.

Fax No.

Cell Phone No.



6. Other pertinent information is as follows:

License No.
(Attach Copy)

Federal Tax ID No.

Federal Employment ID No.

7. List a summary of Dispatch methods used during normal business hours and after hours (radio, beepers, cellular phones etc.). _____

8. List a summary of Fleet utilized for this bid (Quantity, model and year)._____

| | |
|--|--|
| | |
| | |
| | |

9. Include or attach (in detail) Contractor's safety program_____

10. Principal Office Location contiguous of Martin County – Location of principal office, which will be responsible for implementation of this contract. Please list telephone number (s), facsimile number (s) and email address (s).

| | |
|--|--|
| | |
| | |
| | |

11. Other Office Locations – Location of other offices from which resources may be drawn.



SCHEDULE OF PRICES

All rates quoted shall include travel means, labor and any and all equipment and tools required. All disposal charges should be included in the contractor's unit prices. There shall be no charges to and from the District work sites.

The District intends to award a Primary Contractor to the lowest Responsive and Responsible bidder as a basis for award. Items include all profit and overhead, incidentals, all labor, supervision, equipment, tools, materials, cleanup and other means to successfully complete the services herein.

| GROUP A - Routine Hourly Rate Mon-Fri, 7am – 4pm Emergency & Non-Emergency Response 250 Total Estimated Hours | | | |
|--|-------------|---|--------------|
| Item# | Description | Hourly Rate | Annual Total |
| 1 | Journeyman | \$ | \$ |
| 2 | Apprentice | \$ | \$ |
| Group A - Overall Grand Total (Item #'s 1 + 2 =) | | | \$ |
| GROUP B - Overtime Hourly Rate Mon-Fri, 4:01pm - 6:59am, including Weekends (Sat & Sun), and Holidays Emergency & Non-Emergency Response | | | |
| Item# | Description | Hourly Rate | |
| 3 | Journeyman | \$ | |
| 4 | Apprentice | \$ | |
| If you are not the successful bidder awarded as primary provider, would you accept serving as the secondary (backup) provider, with the same terms as conditions as your bid? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| Estimated Annual Hours are for bid evaluation purposes and shall not be construed as a guarantee of materials/hours for services. Actual hours and/or service needed will vary depending upon priorities and budgeting | | | |
| 20% Mark Up of Cost for Parts, Materials& Subcontractors | | 10% Mark Up of Cost for Rental Equipment | |



ALL LINE ITEMS MUST ADD UP TO THE TOTAL COST OF THAT SECTION AND TOTAL COST OF THE BID SUBMITTAL

Submitted on this day of , 2021.

a. (If an individual, partnership, or non-incorporated organization)

Signature of BIDDER

By

b. (If a corporation)

(Affix Seal)

Signature of BIDDER

By

Attested By Secretary

Incorporated under the laws of the State of Florida.

BID PRICES WITHOUT THE MANUAL SIGNATURE OF AN AUTHORIZED AGENT OF THE BIDDER SHALL BE REJECTED AS NON-RESPONSIVE, NON-CONFORMING AND INELGIBLE FOR AWARD.



CERTIFICATE
(For Partnership)

I HEREBY CERTIFY that a meeting of the partners of _____, a Partnership under the laws of the State of _____ held on _____, 2021, the following resolution was duly passed and adopted:

"RESOLVED, that _____ as _____ of the Partnership, is hereby authorized to execute the Bid Form dated _____, 20____, between the Martin County School District, Florida, and this Partnership, and that the execution thereof, attested by the _____ of the Partnership be the official act and deed of this Partnership."

I further certify that said resolution is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand this _____ day of _____, 2021.

Signature

Title

STATE OF FLORIDA

COUNTY OF _____

Sworn to and subscribed before me on this _____ day of _____, 2021 by _____ who is personally known to me or who has presented the following type of identification:

_____.

Signature of Notary Public, State of Florida

Notary seal (stamped in black ink)

OR

Printed, typed or stamped name of Notary and Commission Number



CERTIFICATE
(For Corporation)

I HEREBY CERTIFY that a meeting of the Board of Directors of _____, a corporation under the laws of the State of _____ held on _____, 2021, the following resolution was duly passed and adopted:

"RESOLVED, that _____, as _____ of the Corporation, is hereby authorized to execute the Bid Form dated _____, 20____, between the Martin County School District, Florida, and this Corporation, and that the execution thereof, attested by the Secretary of the Corporation and with corporate seal affixed, shall be the official act and deed of this Corporation".

I further certify that said resolution is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand this ____ day of _____, 2021.

Secretary

STATE OF FLORIDA

COUNTY OF _____

Sworn to and subscribed before me on this ____ day of _____, 2021 by _____ who is personally known to me or who has presented the following type of identification: _____.

Signature of Notary Public, State of Florida

Notary seal (stamped in black ink)
OR
Printed, typed or stamped name of Notary and
Commission Number



BID BOND

STATE OF _____

COUNTY OF _____

KNOW ALL MY BY THESE PRESENTS that _____ as Principal, hereinafter called BIDDER and _____ as Surety, are held and firmly bound unto the Martin County School District, hereinafter called the DISTRICT in the penal sum of:

_____ Dollars \$_____

lawful money of the United States, for the payment of which sum will and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITIONS OF THIS OBLIGATION ARE SUCH, that whereas the BIDDER has submitted the accompanying Bid, dated _____, 20____, for:

PROJECT NAME _____

BID NO: _____

NOW, THEREFORE,

1. It is a condition precedent to the submission of said Bid that a certified check, cashiers check or bid bond in the amount of five percent (5%) of the base Bid be submitted with said Bid as a guarantee that BIDDER will, if awarded the contract, enter into a written contract with DISTRICT.
2. If the BIDDER shall not withdraw said bond within ninety (90) days after date of the same, and shall within fifteen (15) days after the prescribed forms are presented to him for signature, enter into a written contract with the DISTRICT in accordance with the Bid as accepted, and give bonds with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such contract, then the above obligation shall be void and of no effect, otherwise the sum herein stated shall be due and payable to DISTRICT and the Surety herein agrees to pay said sum immediately upon demand of the DISTRICT in good and lawful money of the United States of America as liquidated damages for failure thereof of said BIDDER.

IN WITNESS WHEREOF, the above bounded parties executed this instrument under their several seals, this _____ day of _____, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.



WITNESS: (If Sole Ownership or Partnership, two (2) Witnesses required. If Corporation, Secretary Only will attest and affix seal.)

WITNESSES:

_____ FIRM

_____ By Signature & Title

(AFFIX SEAL)

_____ Typed Name & Title Signed Above

ATTEST:

_____ CORPORATE SURETY (Affix Seal)

_____ Secretary

_____ By Signature & Title

_____ Typed Name & Title Signed Above

_____ Attorney in Fact (Affix Seal)

_____ Business Phone

_____ Business Address

_____ District

_____ State

(AFFIX SEAL)

_____ Name of Local Insurance Agency



CERTIFICATE AND AFFIDAVIT FOR BONDS (MUST BE SUBMITTED WITH ALL BONDS)

TO: THE MARTIN COUNTY SCHOOL DISTRICT BOARD

RE: Solicitation No: _____

Firm: _____

Name: _____

Address: _____

City/ State: _____ ZIP: _____

Phone: _____

Bond Amount: _____

SURETY BOND COMPANY:

Name: _____

Address: _____

City/ State: _____ ZIP: _____

Phone: _____

This is to certify that in accordance with Chapter 85-104, Laws of Florida (HB 1266) the insurer named above:

1. Holds a certificate of authority authorizing it to write surety bonds in the state of Florida;
2. Has twice the minimum surplus and capital required by the Florida Insurance Code; and
3. Holds a current valid certificate of authority issued by the United States Department of Treasury under Sections 9304 to 9308 of Title 31 of the United States Code.

Date

Agent and Attorney-in-Fact



BIDDER'S QUALIFICATION'S QUESTIONNAIRE

THE UNDERSIGNED GUARANTEES THE TRUTH AND ACCURACY OF ALL STATEMENTS AND ANSWERS HEREIN CONTAINED:

GENERAL INFORMATION: Contractor shall furnish the following information. Information provided shall fully explain the firm's qualifications and experience of their Organization. Failure to comply with this requirement will render submittal non-responsive and shall cause its rejection. **Additional sheets can be attached as required.**

1. Contractor's Name, Principal Address, Phone Number, Fax Number, and email address as follows:

Contractor's Name and Principal Address: _____

Contact Person's Name and Title: _____

Contractor's Telephone, _____ Fax Number: _____

Contractor's Email address: _____

Contractor's License Number: _____
(Please attach certificate of status, competency, and/or state registration.)

Certification: MBE SFDB MWBE DVBE SBA Other
(Please attach certificate)

Contractor's Federal Identification Number: _____

2. Number of years your organization has been in business _____

State the number of years your firm has been in business under your present business name _____

State the number of years your firm has been in business in the work specific to this solicitation: _____

Names and titles of all officers, partners or individuals doing business under trade name:

3. How many years under a previous business name? List name(s) below.

4. Type of Business:

Sole Proprietorship Partnership Corporation Joint Venture

If a Corporation, answer this: _____

If a Partnership or Individual Proprietorship, answer this: _____

Date of incorporation: _____

Date of organization: _____

In what State: _____

If a partnership, state whether partnership is general, limited association: _____



5. Names and titles of all officers, partners or individuals doing business under trade name:

| | |
|------------------|-------------------------------|
| Name of Officers | Name and Address of Partners: |
| President: | |
| Vice President: | |
| Vice President: | |
| Secretary: | |
| Treasurer: | |

**SUBSIDIARY OR AFFILIATED COMPANIES
IN WHICH PRINCIPALS HAVE FINANCIAL INTEREST**

| NAME AND ADDRESS OF SUBSIDIARY OR AFFILIATED COMPANIES | EXPLAIN IN DETAIL THE PRINCIPAL'S INTEREST IN THIS COMPANY AND NATURE OF BUSINESS |
|--|---|
| | |
| | |
| | |

6. Business Structure – Corporation, Joint Venture, or Partnership. Applicants submitting applications as joint ventures, shall submit a copy of their joint venture agreement. If a joint venture or prime/subcontractor arrangement of two (2) firms, indicate how the work will be distributed between the partners.

| Business Structure | Indicate By (X) | Copy of Joint Venture Agreement Attached (Y/N) | If applicable, how will work be distributed between partners? |
|--------------------|-----------------|--|---|
| Corporation | | | |
| Joint Venture | | | |
| Partnership | | | |

Length of time in business for separate Firms of a Joint Venture

| Firm(s) Name | Length of Time in Business |
|--------------|----------------------------|
| | |
| | |
| | |



7. Firm is a certified Minority Business Enterprise as defined in Florida Statute 287.09431, and proof is attached.
 Yes No

8. Have you, in the previous five years, been denied a contract award on which you submitted the low bid in competitive bidding, or been refused prequalification? If so, please list and describe

9. Within the previous 5 years has your organization or predecessor organizations ever failed to complete a project? If so, state name of organization and reason thereof.

10. Within the previous 5 years has your organization been involved in litigation? If so, please list and explain nature and current status or resolution

11. Within the last 10 years has your organization been convicted of a Public Entity Crime? If so, please explain.

12. Is your organization currently pre-qualified with any governmental agency? If so, please list.

13. Name, address, and telephone number of surety company and agent who will provide the required bonds on this contract:

14. Have the Surety Company who will provide your bonds (said Surety Company must have an AM Best rating of Class XI A or better per the Supplementary Conditions, Section IV), provide you with written verification showing that your firm will be bonded for the amount of the contract. This must be submitted with your bid.

15. Contractor must list a minimum of three (3) projects within past five years of comparable commercial plumbing projects.

| A Project Description Location, Date | B Owner, Phone, Fax, Email | C Total Amount of Your Contract Or Subcontract) | D Amount In Column C Sublet To Others | E Uncompleted Amount of Contract |
|--|----------------------------------|--|--|---|
| | | | | |
| | | | | |
| | | | | |
| Total | Total | Total | Total | Total |



16. List the pertinent experience of the key individuals of your organization assigned to this project.(continue on insert sheet, if necessary).

A licensed Journeyman Plumber must be on each job at all times. A Journeyman plumber is required to have five (5) year's comparable commercial plumbing experience with a current plumbing license and must present card, if requested by the District. The licensed Journeyman shall also represent as the assigned Supervisor for the District account. This assigned Supervisor will be responsible for overseeing all work performed. Contractor must provide trained personnel with adequate experience and skills to perform the work. Apprentices/helpers/laborers may be employed provided they work under the direct supervision of a qualified journeyman in accordance with trade regulations.

| MASTER PLUMBER LICENSE/CERTIFICATIONS | HOW LONG WITH PRESENT FIRM | YEARS OF PLUMBING EXPERIENCE | IN WHAT CAPACITY AREA OF RESPONSIBILITY |
|--|-------------------------------|------------------------------------|---|
| | | | |
| | | | |
| | | | |

| JOURNEYMAN - ASSIGNED SUPERVISOR/OBTAINED LICENSE | YEARS OF MANAGEMENT EXPERIENCE | YEARS OF PLUMBING EXPERIENCE | IN WHAT CAPACITY, AREA OF RESPONSIBILITY |
|---|--------------------------------------|------------------------------------|--|
| | | | |
| | | | |
| | | | |

17. List your firm, licensing, type of work licensed for, and also the licensing and types of technicians, laborers, apprentices.

| Name | License# | Type of Work |
|------|----------|--------------|
| | | |
| | | |
| | | |
| | | |

18. **List Contractor Owned Equipment, including Equipment Operator:** The cost of Contractor owned special equipment will be allowed as an option, the hourly rate shall include the cost of the equipment operator. Indicate the type of special equipment owned and the hourly rates for use of this equipment. Written approval from the Maintenance/Facilities representative is required prior to the use of this equipment. Additional equipment that may be purchased by the Contractor after the award of bid may be added to the scope of Contractor owned equipment.



| OPTION | | |
|--------|----------------------------------|-----------|
| Item | Description of Equipment | HRLY RATE |
| 1 | Smoke Machine for Leak Test | \$ |
| 2 | Camera System for Video of Pipes | \$ |
| 3 | | \$ |
| 4 | | \$ |
| 5 | | \$ |
| 6 | | \$ |
| 7 | | \$ |
| 8 | | \$ |
| 9 | | \$ |
| 10 | | \$ |

19. What equipment will you purchase for the proposed WORK? (Attach additional sheets as necessary)

20. What equipment will you rent for the proposed WORK? (Attach additional sheets as necessary)

21. List and describe all bankruptcy petitions (voluntary or involuntary) which have been filed by or against the Proposer, its parent or subsidiaries or predecessor organizations during the past five (5) years. Include in the description the disposition of each such petition.

22. List and describe all successful Bond claims made to your surety (ies) during the last five (5) years. The list and descriptions should include claims against the bond of the Proposer and its predecessor organization(s).

23. List all claims, arbitrations, administrative hearings and lawsuits brought by or against the Bidder or its predecessor organizations(s) during the three (3) years. The list shall include all case names; case, arbitration or hearing identification case or file numbers; the name of the engagement over which the dispute arose; and a description of the subject matter of the dispute, and the status or disposition of the reported action. For joint venture or team Bidders, submit the requested information for each member of the joint venture or team. Use additional paper if necessary.

24. List and describe all criminal proceedings or hearings concerning business related offenses in which the Bidder, its principals or officers or predecessor organization(s) were defendants.

25. Has the Firm, its principals, officers or predecessor organization(s) ever filed for bankruptcy? If so, provide details.



The Firm acknowledges and understands that the information contained in response to this Qualification's Questionnaire shall be relied upon by DISTRICT in awarding the contract and such information is warranted by Firm to be true. The discovery of any omission or misstatement that materially affects the Firm's qualifications to perform under the contract shall cause the DISTRICT to reject the Bid, and if after the award, to cancel and terminate the award and/or contract.

The Firm also acknowledges that all information listed above may be checked by the DISTRICT and authorizes all entities or persons listed above to answer any and all questions. Firm hereby indemnifies the DISTRICT and persons or entities listed above and hold them harmless from any claim arising from such authorization or the exercise thereof, including the dissemination of information requested above.

Print Name/Title

Date:

Signature

Email:



SUBCONTRACTOR LIST

On occasion, the use of subcontracted services may be required. This is for service that is needed on occasion, not in the regular course of plumbing services. Subcontracted services for repairs, installations, and emergency services for plumbing services are to be billed at net cost, with prior approval by District designee. A maximum of 20% mark-up will be allowed. A mark-up on sales tax will not be allowed. The Contractor's invoices will clearly show the description of the subcontracted service, cost, and percent mark-up cost. A copy of the Subcontractor's invoice will be submitted with the Contractor's invoice. Include the name of the person to be contacted, telephone number and extent of work to be performed. This information is to be submitted with bid response. If Contractor should need to change subcontractor information, changes are subject to the approval by the District. The District reserves the right to reject a bid of any bidder if the bid names a subcontractor who has previously failed in the proper performance of an award or failed to deliver on time contract of a similar nature, or who is not in a position to perform properly under this award.

The undersigned Contractor hereby designates, as follows, all major subcontractors whom he proposes to utilize for the major areas of work for the project. The Contractor is further notified that all subcontractors shall be properly licensed, bondable and shall be required to furnish the Owner with a certificate of insurance in accordance with Section IV. Failure to furnish this information shall be grounds for rejection of the Contractor's submittal.

| <u>Name, Address/ Phone#</u> | <u>License#</u> | <u>Specialty-Duties</u> | <u>Contract Amount \$</u> | <u>% of contract</u> |
|------------------------------|-----------------|-------------------------|---------------------------|----------------------|
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |

By _____
Signature

Date _____



TRENCH SAFETY ACT COMPLIANCE

Contractor acknowledges that the Florida Trench Safety Act, Section 553.60 et. seq., which became effective October 1, 1990, shall be in effect during the period of construction of the project. The Contractor by signing and submitting the Bid is, in writing, assuring that it will perform any trench excavation in accordance with the applicable trench safety standards. The Contractor further identifies the following separate item of cost of compliance with the applicable trench safety standards as well as the method of compliance.

| Method of Compliance | Cost |
|----------------------|------|
| | \$ |
| | \$ |
| | \$ |
| | \$ |
| | \$ |
| | \$ |
| | \$ |
| | \$ |
| | \$ |

Contractor acknowledges that this cost is included in the applicable items of the Bid Form and in the Grand Total Bid Price. Failure to complete the above and sign below may result in the bid being declared non-responsive.

The Contractor is, and the District and EOR are not, responsible to review or assess District's safety precautions, programs or costs, or the means, methods, techniques or technique adequacy, reasonableness of cost, sequences or procedures of any safety precaution, program or cost, including but not limited to, compliance with any and all requirements of Florida Statute Section 553.60 et. seq. cited as the "Trench Safety Act". Contractor is, and the District and EOR are not, responsible to determine if any safety or safety related standards apply to the project, including, but not limited to, the "Trench Safety Act".

By _____
Signature

(Print or Type Name)

Date _____



WARRANTIES

In consideration of, and to induce the Award of **THE MARTIN COUNTY SCHOOL DISTRICT**, Construction Contract described in these Bid Documents, the Contractor represents and warrants to the Martin County School District:

1. The Contractor is financially solvent and sufficiently experienced and competent to perform all of the work required of the Contractor in the Construction Contract; and
2. That the facts stated in the Contractor's Bid and information given the Contractor pursuant to the request or proposal for Bids, instructions to Contractors and Specifications are true and correct in all respects; and
3. That the Contractor has read and complied with all of the requirements set forth in the request for Bids, instructions to Contractors and Specifications; and
4. That the Contractor warrants all materials supplied by it under the terms of the Construction Contract are delivered to the Martin County School District, free from any security interest, and other lien, and that the Contractor is a lawful owner having the right to sell the same and will defend the conveyance to the Martin County School District, against all persons claiming the whole or any part thereof; and
5. That the materials supplied to the Martin County School District, under the Construction Contract are free from the rightful claims of any persons whomsoever, by way of patent or trademark infringement or the like; and
6. That the materials supplied under the Construction Contract are merchantable within the meaning of the Uniform Commercial Code Section 2-314; and
7. That the materials supplied under the Construction Contract are free from defects in materials and workmanship under normal use and service and that any such materials found to be defective shall be replaced by the Contractor as per the attached Warranty.
8. That the materials supplied pursuant to the Construction Contract are fit for the purposes for which they are intended to be used; that under normal use and maintenance the material will continue to be fit for such purposes for the warranty period after delivery, provided that the District shall give the Contractor notice that the materials failed to fulfill the warranty; such notice shall state in what respect the materials have failed to fulfill the warranty, where upon the Contractor shall be allowed a reasonable time after receipt of such notice to correct the defect and the District agrees to cooperate in this regard. If the materials cannot be made to fulfill the Contract within the warranty period the Contractor will either furnish duplicate materials, or at its option refund the amount paid, which shall constitute a settlement in full for all damages occasioned by reason at this warranty of fitness; and
9. That this Warranty is included in exposures for which the Contractor has products liability and completed operations insurance, in minimum amounts of One Hundred Thousand (\$100,000.00) Dollars for property damage and Two Hundred Thousand (\$200,000.00) Dollars for personal injury as shown on the Certificates of such Insurance attached hereto, and the Contractor agrees to keep such insurance coverage during the period of this Warranty; and
10. That it is an express condition of this Warranty that the item(s) hereby warranted shall be operated and maintained by the District in accordance with the manufacturer's recommendations as to those portions of the item(s) that are not fabricated by the Contractor, and in accordance with the Contractor's recommendations, a copy of which has either been supplied to the District should maintain complete and accurate records made at the time of performance of maintenance showing compliance with such instructions, and by acceptance of this Warranty, the Martin County School District, agrees to present such records to the Contractor upon request in the event of a claim hereunder by the District;



11. The foregoing Warranties apply as a minimum and are supplemental to other Warranties offered. They are not substituted, but in addition to, any other Warranties offered; and
12. That it is agreed and understood by the Contractor that the Martin County School District, is induced to enter the Construction Contract in reliance upon this Warranty.

SIGNED, sealed and delivered on this ____ day of _____, 20____.

(SEAL)

CONTRACTOR:

By _____

ATTEST:

Secretary



REFERENCE FORM

Contractor must provide a minimum of three (3) satisfactory references of similar accounts and size within the past five (5) years; one (1) similar reference must be from a Government entity or School District (public sector entity) within the state of Florida; and provide details of scope of work, location, date of service, names, addresses and phone numbers of owners.

#1 REFERENCE

| | |
|--|----|
| Company/Entity Name: | |
| Address - City, State Zip Code | |
| Contact Name: Title: | |
| Phone No: Fax: Email: | |
| Date of Service or Contract Period: Location | |
| Summary of Services Performed Governmental or Private | |
| Dollar Value of Contract | \$ |

#2 REFERENCE

| | |
|--|----|
| Company/Entity Name: | |
| Address - City, State Zip Code | |
| Contact Name: Title: | |
| Phone No: Fax: Email: | |
| Date of Service or Contract Period: Location | |
| Summary of Services Performed Governmental or Private | |
| Dollar Value of Contract | \$ |

#3 REFERENCE

| | |
|--|----|
| Company/Entity Name: | |
| Address - City, State Zip Code | |
| Contact Name: Title: | |
| Phone No: Fax: Email: | |
| Date of Service or Contract Period: Location | |
| Summary of Services Performed Governmental or Private | |
| Dollar Value of Contract | \$ |



NON-COLLUSIVE AFFIDAVIT

STATE OF FLORIDA

COUNTY OF _____

_____ being first duly sworn, deposes and says that:

BIDDER is the _____,
(Owner, Partner, Officer, Representative or Agent)

BIDDER is fully informed respecting the preparation and contents of the attached BID and of all pertinent circumstances respecting such BID;

Such BID is genuine and is not a collusive or sham BID;

Neither the said BIDDER nor any of its officers, partners, owners, agents, representative, employees or parties in interest, including this affidavit, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other BIDDER, firm or person to submit a collusive or sham BID in connection with the Contract for which the attached BID has been submitted; or to refrain from bidding in connection with such Contract; or have in any manner, directly or indirectly, sought by agreement or collusion, or communications, or conference with any BIDDER, firm, or person to fix the price or prices in the attached BID or any other BIDDER, or to fix any overhead, profit, or cost element of the BID Price or the BID Price of any other BIDDER, or to secure through any collusion conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the proposed Contract;

The price of items quoted in the attached BID are fair and proper and are not tainted by collusion, conspiracy, connivance, or unlawful agreement on the part of the BIDDER or any other of its agents, representatives, owners, employees or parties in interest, including this affidavit.

By _____

Subscribed and sworn to before me this _____ day of _____, 20____ by _____ who
 is personally known to me or who has presented the following type of identification: _____.

SEAL

Notary Public (Signature), State of Florida

My Commission Expires: _____



DISCLOSURE OF POTENTIAL CONFLICT OF INTEREST AND CONFLICTING EMPLOYMENT OR CONTRACTUAL RELATIONSHIP

In accordance with Instructions to Bidder's, each BIDDER must disclose, in its submittal, the names of any employees who are employed by BIDDER who are also an employee of MCSB. Persons identified below may have obligations and restrictions applicable to them under Chapter 112, Florida Statutes.

| Name of Bidder's Employee | MCSB Title or Position of Bidder's Employee | MCSB Department/ School of Bidder's Employee |
|---------------------------|---|--|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Check one of the following and sign:

- I hereby affirm that there are no known persons employed by BIDDER who are also an employee of MCSB.
- I hereby affirm that all known persons who are employed by BIDDER, who are also an employee of MCSB, have been identified above.

Signature

Company Name

Name, Title of Official

Business Address, City, State, Zip Code



DRUG FREE WORKPLACE CERTIFICATION

IDENTICAL TIE RFPS: Preference shall be given to businesses with drug-free workplace programs. Whenever two or more bids which are equal with respect to price, quantity, and service are received by the State or by any political subdivision for the procurement of commodities or contractual services, an ITB received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie ITBs will be followed if none of the tied vendors have a drug-free workplace program (Florida Statutes Section 287.087). In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, and available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are under ITB a copy of the statement specified in subsection (1).
4. In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under ITB, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

Signature

(Print or Type Name)



SWORN STATEMENT ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICER AUTHORIZED TO ADMINISTER OATHS.

1. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with any agency or political subdivision of any other state or with the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.
2. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of the public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.
3. I understand that an "affiliate" as defined in Paragraph 287.133(1)(a), Florida Statutes, means:
 - a. A predecessor or successor of a person convicted of a public entity crime; or
 - b. An entity under the control of any person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.
4. I understand that a "person" as defined in Paragraph 287.133(1)(e), Florida Statutes means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.
5. Based on information and belief, the statement that I have marked below is true in relation to the entity submitting this sworn statement. (Indicate which statement applies.)

- Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989.
- The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.
- The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989. However, there has been a subsequent proceeding before a Hearing Officer of the State of Florida, Division of



Administrative Hearings and the Final Order entered by the Hearing Officer determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list. (Attach a copy of the final order)

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH 1 (ONE) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND, THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017, FLORIDA STATUTES FOR CATEGORY TWO OF ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.

(Signature)

STATE OF FLORIDA
COUNTY OF _____

Sworn to and subscribed before me on this ____ day of _____, 20____ by _____ who is personally known to me or who has presented the following type of identification: _____.

Signature of Notary Public, State of Florida

Notary seal (stamped in black ink)
OR
Printed, typed or stamped name of Notary and Commission Number



STATEMENT OF NO BID

Please complete and return this form prior to ITB opening date.

ITB NAME: _____

ITB NO: _____

COMPANY NAME: _____

PHONE NO: _____

We have declined to submit on this solicitation for the following reasons:

Specifications too "restrictive", i.e., geared toward one brand or manufacturer (Please explain below)

Insufficient time to respond to solicitation

We do not offer this product/service or equivalent

Our project schedule would not permit us to perform

Unable to meet specifications, please explain _____

Unable to meet requirements, please explain _____

Specifications unclear, please explain _____

Other, please specify _____

REMARKS:

WE UNDERSTAND THAT IF THE "NO BID" LETTER IS NOT EXECUTED AND RETURNED; OUR NAME MAY BE DELETED FROM THE LIST OF QUALIFIED BIDDERS FOR THE MCS D FOR FUTURE PROJECTS.

Typed Name

Title

Signature

Date



SECTION VIII
SAMPLE AGREEMENT



SAMPLE
MARTIN COUNTY SCHOOL BOARD CONTRACT
FOR
ITB NO. 1009-0-2021/LD
DISTRICT PLUMBING SERVICES

THIS CONTRACT, hereinafter "Contract," awarded and entered into the 16th day of November, 2021, by Agenda Item # _____, and between _____, hereinafter referred to as "Contractor" and the Martin County School District (K12), 1939 SE Federal Highway, Stuart, Florida 34994, hereinafter referred to as "District", for and in consideration of the following terms, conditions and covenants.

I. PURPOSE OF CONTRACT

The District intends to enter into a contract with Contractor for the provision of District Plumbing Services and the payment for those services by the District as set forth herein.

II. SCOPE OF SERVICES

The Contractor shall provide District Plumbing Services on an as needed basis, pursuant to this Contract as hereinafter provided. These services shall include the following:

Section 1. Scope of Service

Contractor shall purchase plumbing materials and services delivered and installed in accordance with the Uniform Plumbing Code, NFPA (National Fire Protection Association codes and standards), local and state regulations, and OSHA (Occupational Safety Hazards Acts) for plumbing work as requested by the Maintenance or Facilities Departments in accordance with the project manual specifications.

The detailed scope of services to be performed and schedule of fees for those services as described in Exhibits A and B (District's original Invitation to Bid) and Exhibit B (Contractor's response to ITB #1009-0-2021/LD as accepted by the District) incorporated herein.

III. CONTRACT PROVISIONS

Section 1. Period of Service

1.1 Term of Contract

The initial term of this contract shall be for a one (1) year period effective December 18, 2021 through December 17, 2022 with the option of two (2) additional one-year renewal periods, upon the mutual written agreement of the parties. The District reserves the right to automatically extend any Contract for up to ninety (90) calendar days beyond the stated Contract term, under the same terms and conditions of said Contract. Additional extensions over the first ninety (90) day extension may not exceed six (6) months for the convenience of either party by mutual agreement to such extensions. The District shall notify the Contractor in writing of such extensions.

The performance period of this contract may be extended upon mutual agreement between the Contractor and the District with no change in terms or conditions. Any extension of performance period under this provision shall be in one-year increments. The contract may be renewed for two (2) additional one-year periods, provided both parties are in agreement. Total contract length, including individual one-year extensions, shall not exceed three (3) years. Prior to each annual renewal, the District may consider price adjustment(s) only when a written request is received a minimum of (180) days prior to the renewal date for review and approval by the District. Consideration of price increases will be given provided such escalations are justified, reasonable and acceptable to the District. All price increases must be documented and Board approved by the District. It is also expected that de-escalation of prices will be extended to the District if the market so reflects. The District reserves the right to not renew any contract regardless of price considerations.

The District reserves the right to automatically extend any Contract for up to ninety (90) calendar days beyond the stated Contract term, under the same terms and conditions of said Contract. Additional extensions over the first ninety (90) day extension may not exceed 6 months for the convenience of either party by mutual agreement to such extensions. The District shall notify the Contractor in writing of such extensions.

1.2 Business Operations

Regular Working Hours: Unless otherwise directed by the Facilities/Maintenance Directors; or his designee, the Contractor(s) shall insure that the following schedule is adhered to and services as required must be scheduled to insure that all work is during normal business hours and must be between the hours of 7:00 AM and 4:00 PM, will be paid at the regular specified hourly rate. Response time for Routine Hours range from immediate (on-site within 4 hours from notice of call) to 24 hours (next day service). Department will convey the work schedule at time of order placement. Contractor's service representative shall respond back to all requests for repair by phone within sixty (60) minutes.

Overtime Working Hours: Overtime hours will be from 4:01pm to 6:59am Monday through Friday, including weekends, District observed holidays, and must be approved by the Project Manager prior to commencement of work actually being performed. Failure to obtain prior approval may result in all work being paid at routine rates. No additional expenses shall be granted for work performed after hours without prior approval. Contractor is not permitted to perform work on any District observed holiday, without the written consent of the District Project Manager. Detailed work schedule shall be determined in advance.

Emergency Repairs: The majority of the work will be done during regular District business hours. Nonetheless, there may be emergencies which require projects to be completed after hours, on weekends or during holidays. In emergency situations, the requirement to provide a written estimate / work order may be waived. Response time for Emergency Hours range from immediate (on-site within 2 hours from notice of call) to 8 hours and shall be defined as regular hours. Contractor must be available by phone 24 hours per day, seven (7) days per week in the event of such an emergency request. Once contacted, the Contractor shall meet with the District Supervisor assigned and review the scope of the work required. Contractor and District personnel shall come to a mutually agreed-upon work schedule at time of order placement. **Contractor's service representative shall respond back to all requests for repair by phone within thirty (30) minutes.** Emergency hours are reserved for Emergency Repairs that are an immediate threat to the public health, welfare, or safety only. OT rates for emergency only apply during specified overtime hours.

Inclement Weather Conditions: Upon approval by the Facilities Director or designee, the Contractor may cease operations of services during inclement weather conditions.

Observed Holidays: The District also schedules non-work days throughout the calendar year. The Facilities/Maintenance Directors or designee will notify the awarded Contractor of any non-work days that may affect the work schedule:

| | |
|------------------------------|------------------------|
| New Year's Day | Martin Luther King Day |
| President's Day | Spring Break |
| Memorial Day | Independence Day |
| Labor Day | Veteran's Day |
| Thanksgiving Day & Day After | Christmas Break |

Schedules: All schedules and the necessary arrangements to implement the scope of work projects must be made with the review and approval of the Supervisor assigned.

All requested work must be completed within the timeframe and the written project schedule agreed upon between the Contractor and the District Supervisor assigned. Additional time may be approved, if necessary, when requested, in writing, by the Contractor.

Each project must be completed as quickly as reasonably possible, not to exceed the number of calendar days set forth in the "Notice to Proceed." The start date of each project shall be the date the "Notice to Proceed" has been issued. The completion date shall be the date mutually agreed upon between the District Supervisor assigned and the Contractor prior to issuing the "Notice to Proceed."

The District also schedules non-work days throughout the calendar year. The Delegate of the District or designee will notify the Contractor of any non-work days that may affect the work schedule at the kick-off meeting.

1.3 Job Responsibilities

The work to be performed by the Contractor consists of furnishing all material, plumbing fixtures/ancillary part replacement, labor, supervision, products and tools, travel, fuel supplies and equipment, as required to successfully perform interior and exterior full service plumbing installation and repair on a project by project basis for the MCSD pursuant to the unit prices herein. This includes, but is not necessarily limited to, connecting and disconnecting portable classrooms with running water and waste lines; installing sanitary sewer lift stations and/or including catch basins, inspections, adjustments, test, and repairs to keep continuous use and efficiency for the intended purpose, and as follows:

All materials, preparation and workmanship shall conform to requirements in accordance with trade regulations.

Only lead free solder shall be used on potable water lines made of copper. On sanitary waste lines, other types of solder may be used.

All repairs and/or installations shall be inspected by the District's Building Official, District Facilities/and or Maintenance Departments.

All repairs and/or installations with any noted deficiencies or failed inspection reports must be corrected before invoice(s) for payment will be processed.

Manufacturer shall be contacted for all work under warranty by the manufacturer and all work performed must protect the current warranty.

For each visit to the job site, the Contractor shall provide a copy of the work order with an update on the disposition of job, i.e., description of work completed, parts on order (include time frame for delivery of parts), date of return to job site, and estimated date for completion of work. This update should be returned to the originator of the work order. This work order should be received the same day as the job site visit.

As the Contractor will be performing work at locations that will affect a great number of people, communication on the disposition of work orders is critical to the Maintenance or Facilities Services Department.

All repair work shall be permanent.

Contractor may be required to repair, alter, remodel, renovate, add to, subtract from or improve any previous repair.

Any remaining plumbing materials that were either supplied by District or purchased from the Contractor at the conclusion of any particular project remain as District property.

Contractor must have an established / maintained operational service location contiguous of Martin County, as their base location to service this contract, for the licensed, Plumbers specializing in repair and maintenance.

A licensed Journeyman Plumber must be on each job at all times, and is required to have five (5) year's comparable commercial plumbing experience with a current plumbing license and must present card, if requested by the District. The licensed Journeyman shall also represent as the assigned Supervisor for the District account. This assigned Supervisor will be responsible for overseeing all work performed. Contractor must provide trained personnel with adequate experience and skills to perform the work. Apprentices/helpers/laborers may be employed provided they work under the direct supervision of a qualified journeyman in accordance with trade regulations.

All work for this project, including but not limited to, all profit and overhead, incidentals, all labor, mobilization/demobilization, supervision, testing, machinery, equipment, tools, materials, coordination with utility companies, cleanup and other means of construction necessary to complete the described work in accordance with the specifications, and contract documents.

Any specific job or work order request that exceeds \$100,000 must have prior Board approval, and is subject to the following, as identified in Section IV of the solicitation:

- Retainage Procedures;
- Liquidated Damages;
- Insurance Requirements.

1.4 Servicing Procedures

All schedules must be established in advance and with prior approval. All schedules and the necessary arrangements to implement the scope of work must be mutually reviewed and approved by the Contractor and

Project Manager or Designee. Contractor agrees and understands that the contract shall not be construed as an exclusive arrangement and further agrees that the District may, at any time, secure similar or identical services at its sole option. The Contractor shall endeavor to assign all requested services without the necessity of overtime labor. All repair work to be performed, in the best workmanlike manner, as known to the trade.

The District will contact the Contractor to advise of either regular, OT, or emergency repair services needed. At no cost to the District, the Contractor shall meet with the District representative at the site where work is needed to determine the type of work to be performed. The Project Manager may require the Contractor's representative to attend a meeting prior to the commencement of work at each project. Contractor shall submit a written estimate (work order). This estimate shall include a total firm cost to the District itemized as follows; labor hours, equipment, itemization costs for material/parts, a brief description of the repair work to be done and location of work.

Estimates must be complete and specific with measurements and quantities of time, completion, and materials. If the District is interested in proceeding with the work identified on the Contractor's written estimate, the District Project Manager will sign off on the work order/estimate which shall act as the notice to proceed for commencement of work. (Upon Request, District may request copies of manufacturers list pricing from Contractor's suppliers as proof of material cost).

Upon completion of services, the District reserves the right to request a Supervisor to review the work performed by their technician if deemed necessary. Supervisors review to be at no additional charge to the District and considered part of the contract award. The District's Project Manager reserves the right to request the Contractor to review and provide written acknowledgement/report that work performed has been completed. Contractor's review to be at no additional charge to the District and considered part of the contract award. Contractor shall document any areas of concern that are above and beyond on their report. The report shall be signed by an authorized agent of the firm and submitted to the Project Manager by email address provided to the awarded Contractor.

Contractor must maintain complete and accurate records of all services provided pursuant to the terms of this agreement. All work-repair tickets, service calls, etc. shall be kept in a separate file for the District to be used as a work history for each of the units. Contractor shall establish a written quarterly quality control program to insure requirements of the contract are provided such as: record of response performance, total elapsed time from receipt of call to arrival at the job site, number of trips to the job site taken to complete each repair/installation, the number of mechanics/technicians and/or helpers required to complete each repair, a detailed description of their diagnosis, prognosis, any materials/supplies required, and location of work.

If the Contractor shall be delayed in the completion of its work by reason of unforeseeable causes beyond its control and without fault or negligence, including, but not restricted to, acts of God or neglect of any other contractor, the period herein specified above specified for the completion of delivery shall be extended by such time as shall be approved by the Project Manager or designee.

Section 2. Compensation and Method of Payment

2.1 Schedule of Bid Prices

District will compensate Contractor for District Plumbing Services in accordance with Contractor's pricing schedule formalized in "Exhibit B" to this Contract.

2.2 Report

Contractor will be required to establish a written quality control program to insure requirements of the contract are provided such as: record of response performance, total elapsed time from receipt of call to arrival at the job site, number of trips to the job site taken to complete each repair/installation, the number of mechanics/technicians and/or helpers required to complete each repair.

2.3 Unit Prices

Unit prices must be inclusive of response time, travel time from portal to portal, time for the preparation of estimates, supplying or acquiring materials, attending mandatory pre-job conferences, the administration of the contract by the Contractor or the processing of submittals, invoices or paperwork. Separate billing for these types of labor will NOT be considered with the exception of the following:

Contractor shall obtain permits in the scope of this work. Contractor shall handle the permit application process through the District Building Official.

Re-Inspection Fees: Non-Conforming Work and Re-inspection Fees:

2.4 Invoices

The District requires a firm price for each contract period. Invoices will be checked to confirm compliance with quoted pricing. Failure to hold prices firm through each contract term will be grounds for contract termination.

Each service call shall be invoiced separately. The invoice shall reflect the hourly labor rate and number of hours on-site and a separate itemized listing of the materials. For invoices involving materials, copies of list price/catalog shall be submitted for verification. Failure to supply copies of invoices may result in contract cancellation.

The hourly rate per call, whether equipment is repaired/serviced at the site or the contractor's shop, shall remain fixed through the term of the contract. There will be no additional charges for mileage and/or travel time. The first hour of service call may only be charged once per work order, after the initial service call.

All rates quoted shall include travel means, labor and any and all equipment and tools required. All disposal charges should be included in the contractor's overhead. There shall be no charges to and from the District work sites. The District will pay a minimum 1-hour of service for repairs performed. **Contractor shall round to the ½ hour for all work performed in excess of an hourly increment.**

2.5 Payment by means of the District Purchasing Card (Pcard)

Payment will be paid upon completion and acceptance of the work, net 30 days. Invoices will be checked to confirm compliance with reports. Payments may also be paid by the Visa Purchasing Card or Automated Clearing House (ACH) electronic network for financial transactions with authorization.

Section 3. Audit

The Contractor agrees that the District or any of its duly authorized representatives shall, until the expiration of three years after expenditure of funds under this Agreement, have access to and the right to examine any directly pertinent books, documents, papers, and records of the Contractor involving transactions related to this Agreement. The Contractor agrees that payment(s) made under this Agreement shall be subject to reduction for amounts charged thereto which are found on the basis of audit examination not to constitute allowable costs under this Agreement. The Contractor shall refund by check payable to the District the amount of such reduction of payments. All required records shall be maintained until an audit is completed and all questions arising therefrom are resolved, or three years after completion of the project and issuance of the final certificate, whichever is sooner.

Section 4. Employment Verification

Pursuant to section 448.095, Florida Statutes, Contractor shall register with and use the U.S. Department of Homeland Security's E-Verify system, <https://e-verify.uscis.gov/emp>, to verify the work authorization status of all employees hired on and after January 1, 2021.

Contractor must provide evidence of compliance with section 448.095, Florida Statutes. Evidence shall consist of an affidavit from the Contractor stating all employees hired on and after January 1, 2021 have had their work authorization status verified through the E-Verify system and a copy of their proof of registration in the E-Verify system.

Failure to comply with this provision is a material breach of the Agreement and shall result in the immediate termination of the Agreement without penalty to School Board. Contractor shall be liable for all costs incurred by School Board securing a replacement Agreement, including but not limited to, any increased costs for the same services, any costs due to delay, and rebidding costs, if applicable.

Section 5. Contractor Responsibilities

5.1 Independent Contractor

The **Contractor** is an independent **Contractor** and is not an employee or agent of the District. Nothing in this Agreement shall be interpreted to establish any relationship other than that of an independent **Contractor**, between the District and the **Contractor**, its employees, agents, subcontractor, or assigns, during or after the performance of this Contract.

5.2 Non-Exclusive Contract

Contractor agrees and understands that the contract shall not be construed as an exclusive arrangement and further agrees that the District may, at any time, secure similar or identical services at its sole option.

5.3 Contractor's Records

As a condition precedent to **Contractor** filing any claim against District, **Contractor** shall make available to District all of **Contractor's** books and records (directly or indirectly related to the claim of **Contractor's** business) requested by District. Refusal to do so shall constitute a material breach of this contract and cause for dismissal of any litigation.

5.4 Utilities

Contractor is responsible for contacting Sunshine State One Call of Florida at (800) 432-4770, www.callsunshine.com, for member public utility locations and must repair all member public utility or service lines damaged by their repairs immediately upon notice of such damage. Failure to respond immediately for such repairs will bring back charges to the Contractor for all costs to District to repair damaged lines. The District Supervisor assigned will work with the Contractor when it is necessary to identify District-owned overhead service lines, repairs to which will NOT be the responsibility of Contractor.

5.5 Measurements

Contractor will be responsible for their own measurements and must submit a firm price accordingly by work order request. There will be no adjustments, for increase or decrease of measurements required for the job. Therefore, the "Total Offer" must be based on accurate measurements by Contractor during inspection. Failure to do so will be at the Contractor's risk.

5.6 Inspection of Facilities

It is the Contractor's responsibility to become fully informed as to the nature and extent of the work required and its relation to any other work in the area, including possible interference from other site activities. Thereby, Contractor is responsible for confirming actual site conditions prior to starting work, and assures that the work order produced will be completed as specified. **Any oral explanation provided prior to the bid opening will not be binding.**

5.7 Identification

The Contractor, Subcontractors, and their employees are required to have visible, personal identification with the firm's company name displayed on their shirts. They will also be required to wear attire appropriate for a school environment: i.e., shirt, pants, & shoes. Clothing displaying nudity, obscene symbols, or pro-drug slogans is prohibited. The Contractor, Subcontractors, and all employees of same must check in and out at the main office before starting work during normal school hours. Before or after normal school hours, contact the on-site custodial staff.

5.8 Conduct

The Contractor acknowledges and understands that the job is being performed on public property owned by the MCSD, which may at various times during the completion of the job be occupied by students, teachers, parents, and school administrators. Accordingly, in order to secure the property, and otherwise comply with applicable law, the Contractor agrees to the following provisions, and also agrees that the failure to comply with any of these provisions may result in the termination of this Contract.

The Contractor shall immediately remove from the job site, for the duration of the job, any person making an inappropriate religious, racial, sexual or ethnic comment, statement or gesture toward any other individual.

The Contractor, Subcontractors, and their employees will refrain from using foul, abusive or profane language on school district property. Smoking/tobacco, firearms/weapons and illegal drugs are prohibited on school district property, including all buildings and grounds.

The Contractor shall enforce strict discipline and good order among their employees at all times. Contractor's personnel shall have absolutely no contact with students or staff, other than administrative personnel or designated representatives, with the exception of emergency situations.

No radios are allowed on the job site.

5.9 Badge Policy

This work is to take place on an active campus with active buildings around the area of work. All personnel working onsite with this project must have & wear MCSD badge at all times on the site. The Awarded Contractor must apply for the MCSD Badge and pay for all associated costs for each individual working on the project, and as specified in the General Notes of plan drawings.

Section 6. Termination

6.1 Termination for Convenience

The District, by written notice, shall have the right to terminate and cancel the Contract, without the Contractor being at fault, for any cause or for its own convenience, and require the Contractor to immediately stop work. In such event, the District shall pay the Contractor for the work actually performed. The District shall not be liable to the Contractor for any other costs, charges, or expenses, including but not limited to, prospective profits and overhead on work not performed.

6.2 Termination for Contractor's Failure to Perform

In addition to any other termination provisions that may be provided in the Contract, the District may terminate the Contract in whole or in part if the Contractor makes a false Invoice or fails to perform any obligation under the Contract and does not remedy the failure within ten (10) calendar days after receipt by the Contractor of written demand from the District to do so, unless, however, the nature of the failure is such that it cannot, in the exercise of reasonable diligence, be remedied within ten (10) calendar days, in which case the Contractor shall have such time as is reasonably necessary to remedy the failure. In the event that the Contractor abandons this Contract or causes it to be terminated, Contractor shall indemnify the District against loss pertaining to this termination.

6.3 Payment upon Termination

Upon termination of the Contract, the District shall pay the Contractor for those Services actually rendered and contracted for under the Contract, and those reasonable and provable expenses required and actually incurred by the Contractor for Services prior to the effective date of termination. Where the Contract is terminated for cause by the District, such payment shall be reduced by an amount equal to any reasonable and provable expenses actual incurred by the District as a direct result of the termination.

6.4 Default

In case of default by the Contractor, the Board may procure the articles or services from other sources and hold the Contractor responsible for any excess costs incurred thereby.

6.5 Performance Evaluation

Throughout the contract period the Contractor(s) performance will be monitored by District staff. If performance fails to meet the standards specified or noncompliance with the conditions, terms, specifications and requirements of the ITB and receives an unacceptable rating, the District may without cause and without prejudice to any other right or remedy, terminate the contract whenever the District determines that such termination is in the best interest of the District. Contractor's receiving an unacceptable rating shall be served by written notice by the Procurement Department. The District shall be the sole judge of nonperformance.

Section 7. Obligations

7.1 Representative or Delegate of the District with the authority to act on the District's behalf with respect to all aspects of the Project is:

7.2 The Key contact for services for the Contractor with authority to act on the Firm's behalf with respect to all aspects of the Project is:

7.3 Payment & Performance Bonds

Provide evidence confirming the firm's ability to obtain Payment and Performance Bonds as specified in Exhibit C. The Contractor will be required to furnish payment and performance bonds with a carrier duly licensed and authorized to do business in the State of Florida, equal to one hundred percent (100%) of the total amount of the contract to assure faithful performance and timely payments to all persons providing labor, materials or supplies used in the performance of the work.

7.4 Cooperation With District

District reserves the right to supervise all services, repairs and/or installation required under this contract and to provide the requisite parts from District stock. District also reserves the right to have District personnel assist and work together with Contractor's personnel when it is deemed in the best interest of District. This Special Condition will NOT void ANY warranty provisions or ITB Specifications stated in this document, including the one-year "on-site" warranty for parts and labor provided by the Contractor, while working in cooperation with District authorized personnel.

Section 8. Warranty

Should any defect in materials or workmanship, excepting ordinary wear and tear, appear during the below stated warranty period, the Contractor shall repair or replace same at no cost to the District:

8.1 Workmanship

The Contractor shall warranty all workmanship/labor for a period of 12 months from date of completion and final acceptance by the Facilities Department designee. Should any defect in workmanship, excepting ordinary wear and tear, appear during the above stated warranty period, the Contractor shall repair or replace same at no cost to the District, immediately upon written notice from the Facilities Department Designee.

8.2 Materials

The Contractor shall provide full factory warranty on all equipment/materials/parts furnished against defect in materials. The factory warranty shall become effective on the date of delivery and acceptance by the District.

Section 9. Inspection and Direction

The work will be conducted under the general direction of the Project Manager or designee and is subject to inspection to insure compliance with the terms of the bid. The Contractor is not permitted to change any provision of the specification without prior written approval by the Project Manager or designee. Nor shall the presence or absence of the Project Manager or designee relieve the Contractor from any requirements of the bid.

The District's Building Official, Project Manager, or designee will make final inspection of the work covered by this contract when it is completed and finished in all respect in accordance with specifications and must be approved before payment is made. Appointments for the final inspection shall be made one day in advance.

Section 10. Protection of Property

The Contractor shall at all times guard against damage or loss to the property of the District or that of other vendors or contractors, and shall be held responsible for replacing or repairing any such loss or damage. The District may withhold payment or make such deductions, as deemed necessary, to ensure reimbursement or replacement for loss or damage to property through negligence of the Contractor or their agents.

The Contractor shall be responsible for the protection of property in the areas in the adjacent vicinity of the project; and for the protection of his own equipment, supplies, materials and work, against any damage resulting from the elements (such as flooding, rainstorms, wind damage, or other acts of God) or vandalism.

Section 11. Equipment / Materials / Parts

All equipment / materials must be new, of current manufacturer and in production at the time of bid opening, and carry standard warranties. All equipment supplied shall contain complete maintenance instructions, operating manuals and parts lists. Equipment / materials may include, but not limited to; press fitting systems, pipe bender, borecope, plumber's tape, wrenches, tape measure, screwdrivers, plastic pipe and tube cutters, and washers, etc.

Responses will be considered only on equipment that can, on short notice, be serviced and maintained by the Contractor. The Contractor must maintain a normal supply of repair parts and be equipped with personnel and facilities to provide such service as necessary to keep the equipment in operation with a minimum of delay. The District reserves the right to audit and request invoices for cost of materials.

Equipment / Materials may be purchased under this contract at the discretion of the District Department on a cost-plus not to exceed 20% basis. These materials purchased under this contract must be verified by the submission of an itemized list of materials proposed for purchase from the identified source, each unit priced by cost, the total price and the Contractor's cost-plus mark-up. Any remaining materials, after project completion, become the property of District. The District Department is under no obligation to purchase materials under this contract if the materials can be purchased on other District contracts. However, if in the best interest of the District, on a project by project basis, the District may exercise the option to directly purchase equipment at District's cost. It will be the District's responsibility to inspect and accept equipment purchased by District. Contractor will only provide the services required to complete the work with the District purchased materials.

11.1 Special Equipment

All equipment to be utilized shall conform to standards of the trade and be acceptable by the MCSD. On some jobs, the use of special equipment may be required. This equipment is in addition to any equipment used in the regular course of plumbing work. The following applies to the use of this special equipment.

The Contractor's invoices will clearly show the description of specialty Contractor owned equipment used, number of hours or days of active use, and itemized cost.

11.2 Contractor Owned Equipment, including Equipment Operator

The cost of Contractor owned special equipment will be allowed as an option, the hourly rate shall include the cost of the equipment operator. Indicate on the questionnaire form the type of special equipment owned and the hourly rates for use of this equipment. Written approval from the Maintenance/Facilities representative is required prior to the use of this equipment. Additional equipment that may be purchased by the Contractor after the award of bid may be added to the scope of Contractor owned equipment. Minimum required special equipment shall include a smoke machine for leak test and camera system for video of pipes.

11.3 Rental Equipment

On occasion, the use of special rental equipment may be required. This is for equipment that is used on occasion, not in the regular course of plumbing services. The cost of special rental equipment will be allowed based on the Contractor's cost from the rental facility plus a 10% mark-up. A mark-up on sales tax will not be allowed. Rental is for active use only. Payment for inactive use will not be allowed. Written approval from the Maintenance or Facilities representative is required prior to the use of this equipment. The Contractor's invoices will clearly show the description of rental equipment used, number of hours or days of active use, cost, and percent mark-up cost. A copy of the rental equipment invoice will be submitted with the Contractor's invoice.

Section 12. Persons Bound by Contract

12.1 Parties to the Contract

The persons bound by this Contract are the Contractor and the District and their respective partners, successors, heirs, executors, administrators, assigns and other legal representative.

12.2 Assignment of Interest in Contract

This Contract and any interest or services associated with this Contract may not be assigned, sublet or transferred to another by either party without the prior written consent of the other party. Nothing contained herein shall be construed to prevent Contractor from employing such independent Contractors, associates and Sub-Contractors as Contractor may deem appropriate to assist in the performance of the services hereunder.

12.3 Subcontracting

The Contractor shall perform the work with its own employees under its immediate supervision and shall not subcontract any portion of the work unless approved in writing by the authorized representative of the Maintenance or Facilities Services Department.

On occasion, the use of subcontracted services may be required. This is for service that is needed on occasion, not in the regular course of plumbing services. Subcontracted services for repairs, installations, and emergency services for plumbing services are to be billed at net cost, with prior approval by District designee. A maximum of 20% mark-up will be allowed. A mark-up on sales tax will not be allowed. The Contractor's invoices will clearly show the description of the subcontracted service, cost, and percent mark-up cost. A copy of the Subcontractor's invoice will be submitted with the Contractor's invoice. Include the name of the person to be contacted, telephone number and extent of work to be performed. This information is to be submitted with bid response. If Contractor should need to change subcontractor information, changes are subject to the approval by the District. The District reserves the right to reject a bid of any Contractor if the bid names a subcontractor who has previously failed in the proper performance of an award or failed to deliver on time contract of a similar nature, or who is not in a position to perform properly under this award.

12.4 Other Entity Use

The Contractor may be requested to convey its prices, contract terms and conditions, to other governmental agencies within the State of Florida.

12.5 Rights and Benefits

Nothing herein shall be construed to give any rights or benefits arising from this Contract to anyone other than Contractor and the District.

Section 13. Indemnification of District

Contractor agrees to protect, defend, indemnify, and hold harmless the District, its employees, representatives, and elected officials from any and all claims and liabilities including all attorney's fees and court costs, including appeals, for which the District, its employees, representatives, and elected officials can or may be held liable as a result of injury (including death) to persons or damage to property occurring by reason of any negligence, recklessness, or intentional wrongful misconduct of the Contractor, its employees, or agents, arising out of or connected with this Agreement. Contractor shall not be required to indemnify the District or its agents, employees, representatives, or elected officials when an occurrence results solely from the wrongful acts or omissions of the District, or its agents, employees or representatives.

Contractor, without exemption, shall indemnify and hold harmless, the District, its employees, representatives and elected officials from liability of any nature or kind, including cost and expenses for or on account of any copyrighted, service marked, trademarked patented or unpatented invention, process, or any other intellectual property right or item manufactured by the Contractor. Further, if such a claim is made, or is pending, the Contractor may, at its option and expense, procure for the District the right to use, replace, or modify the item to render it non-infringing. If none of the alternatives are reasonably available, the District agrees to return the article on request to the Contractor and receive reimbursement from the Contractor. If Contractor used any design, device or materials covered by letters, patent or copyright, it is mutually agreed and understood, without exception, that the ITB prices shall include all royalties or cost arising from the use of such design, device or materials in any way involved in the work. This article will survive the termination of any contract with the School District.

The parties agree that Ten Dollars (\$10.00) of the total compensation paid to the Contractor for performance of this Agreement shall represent the specific consideration for the Contractor's indemnification of the Owner.

The District reserves the right to select its own legal counsel to conduct any defense in any such proceeding and all costs and fees associated therewith shall be the responsibility of Contractor under the indemnification agreement.

It is the specific intent of the parties hereto that the foregoing indemnification complies with F.S. 725.06 (Chapter 725). It is further the specific intent and agreement of the parties that all of the Contract Documents on this Project are hereby amended to include the foregoing indemnification and the "Specific Consideration" therefore.

Section 14. Insurance.

14.1 Requirements

Contractor shall procure and maintain insurance, in the amounts noted in in Section IV of the Invitation to Bid and included in “**Exhibit D**” of this Contract, which names the Contractor, its officers, board members, employees and agents as additional insured on General Liability and Automobile Liability insurance policies. Such certificate must contain a provision for notification of the District 30 days in advance of any material change or cancellation. The District by and through its Risk Manager, reserves the right to review, modify, reject or accept any required policies of insurance, including limits coverages or endorsements, herein from time to time throughout the term of this contract. All insurance carriers must have an A.M. Best Rating of at least A: VIII or better. When a self-insured retention or deductible exceeds \$5,000, the District reserves the right, but not the obligation, to review and request a copy of Contractor’s most recent annual report or audited financial statement. All Contractors, including any independent Contractors and Sub-Contractors utilized, must comply with the insurance requirements as set forth in the documents identified and listed in “**Exhibit D**” attached hereto.

14.2 Certificate of Insurance

Certificates of all insurance required from the Contractor shall be attached to this agreement and shall be subject to the District’s approval for adequacy.

Section 15. Professional Standards

All work shall be performed in a professional manner and shall conform to all applicable District, County, State and Federal Regulations and/or Codes. The Contractor shall also be responsible for obtaining all permits and licenses required to begin work, including the following:

Furnish all parts and tools necessary to perform complete maintenance/repair services as specified in a safe manner. The Contractor shall perform repairs requiring an electrician, unless predetermined that the District will perform the plumbing work. Repairs shall include diagnosis, removal and replacement of defective components, as service requires.

Manufactured items, fabricated assemblies and on-site contractor services shall comply with all applicable federal, state and local requirements. For on-site contractor services, the District reserves the right to request documentation of contractor compliance with OSHA standards to include but not be limited to: required employee safety & health training, written safety and health programs, provision of required personal protective equipment (PPE), and/or provision and use of required atmospheric monitoring equipment. Hazardous chemicals must be accompanied by a Material Safety Data Sheet (MSDS), as required by the Occupational Safety and Health Act (OSHA) of 1970; as amended, and any other applicable federal, state and local regulations.

Equipment must meet all State and Federal safety regulations for grounding of electrical equipment. The Martin County School District, Florida intends to purchase plumbing materials and services delivered and installed in accordance with the Uniform Plumbing Code, NFPA, National Fire Protection Association codes and standards, local and state regulations, and as requested by the Maintenance Services Department or Facilities Services Department.

Section 16. Non-Appropriation

This Contract is deemed effective only to the extent of the annual appropriations available.

Section 17. General Conditions

17.1 Venue in Martin County

Jurisdiction a venue for any lawsuit to enforce the terms and obligations of this Contract shall lie exclusively in the County Court or the Circuit Court in and for Martin County, Florida.

17.2 Laws of Florida

The validity, interpretation, construction, and effect of this Contract shall be in accordance with and governed by the laws of the State of Florida.

17.3 Attorney’s Fees and Costs

In the event the Contractor breaches or defaults in the performance of any of the terms, covenants and conditions of this Contract, the Contractor agrees to pay all damages and costs incurred by the District in the enforcement of this Contract, including reasonable attorney's fees, court costs and all expenses, even if not taxable as court costs, including, without limitation, all such fees, costs and expenses incident to appeals incurred in such action or proceeding.

17.4 Mediation as Condition Precedent to Litigation

Prior to the initiation of any litigation by the parties concerning this Contract, and as a condition precedent to initiating any litigation, the parties agree to first seek resolution of the dispute through non-binding mediation. Mediation shall be initiated by any party by serving a written request for same on the other party. The parties shall, by mutual agreement, select a mediator within 15 days of the date of the request for mediation. If the parties cannot agree on the selection of a mediator then the District shall select the mediator who, if selected solely by the District, shall be a mediator certified by the Supreme Court of Florida. The mediator's fee shall be paid in equal shares by each party to the mediation.

17.5 Contract Amendment

The District may require additional products or services of a similar nature, but not specifically identified in the contract. The Contractor agrees to provide such items/services, and shall provide the District prices on such additional items or services based upon a formula or method which is the same or similar to that used in establishing the prices in this contract. If the price(s) offered are not acceptable to the District, and the situation cannot be resolved to the satisfaction of the District, the District reserves the right to procure those items/services from other Contractors or to cancel the contract. Furthermore, the District reserves the right to delete or revise items and services under this proposal at any time during the contract period when and where deemed necessary. Deletions may be made at the sole discretion of the District at any time during the contract period. Items revised must be mutually agreed upon in writing by the Contractor.

No modification, amendment or alteration in the terms or conditions contained in this Contract shall be effective unless contained in a written documents executed with the same formality and of equal dignity herewith. This Contract constitutes the entire agreement between the parties, and no prior, or contemporaneous oral agreement shall be binding on either party. If either party fails to enforce a portion or all of this Contract, it shall not constitute a waiver of the same.

17.6 Contractual Authority

By signing this Contract the Contractor swears or affirms, under penalty of perjury, that this is a valid act of the Contractor, and that no later claim shall be made by the Contractor that the Contract is invalid or an *ultra vires* act, by reason of a failure to have the proper authority to execute the Contract. In the event that a court of competent jurisdiction later determines that the Contract is or would be null and void for failure of the signatory to have proper or complete authority, this Contract shall nonetheless be deemed valid under the theory of "apparent authority," or in the sole alternative of the District, shall be deemed to be the act of the signatory, as an individual, who shall be fully responsible for its complete performance.

17.7 Sovereign Immunity

Nothing contained herein shall be construed or interpreted as a waiver of the sovereign immunity liability limits established under chapter 768.20 Florida Statutes as amended.

Section 18. 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 772. 219.1200, ext. 30201, 1939 SE Federal Highway, Stuart, Florida 34994 or click [here](#) as per F.S. 119.12.

Public Records Relating to Compliance, Request for Records; Noncompliance, & Civil Action with F.S. 119.0701 the Contractor shall:

Keep and maintain public records required by the public agency to perform the service.

Upon request from the public agency's custodian of public records, provide the public agency 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 this chapter or as otherwise provided by law.

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 the contract if the Contractor does not transfer the records to the public agency.

Upon completion of the contract, transfer, at no cost, to the public agency all public records in possession of the Contractor or keep and maintain public records required by the public agency to perform the service. If the Contractor transfers all public records to the public agency upon completion of the 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 the contract, the Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the public agency, upon request from the public agency's custodian of public records, in a format that is compatible with the information technology systems of the public agency.

A request to inspect or copy public records relating to a public agency's contract for services must be made directly to the public agency. If the public agency does not possess the requested records, the public agency shall immediately notify the Contractor of the request, and the Contractor must provide the records to the public agency or allow the records to be inspected or copied within a reasonable time.

If a Contractor does not comply with the public agency's request for records, the public agency shall enforce the contract provisions in accordance with the contract.

A Contractor who fails to provide the public records to the public agency within a reasonable time may be subject to penalties under F.S. [119.10](#).

If a civil action is filed against a Contractor to compel production of public records relating to a public agency's contract for services, the court shall assess and award against the Contractor the reasonable costs of enforcement, including reasonable attorney fees, if:

1. The court determines that the Contractor unlawfully refused to comply with the public records request within a reasonable time; and
2. At least eight (8) business days before filing the action, the plaintiff provided written notice of the public records request, including a statement that the Contractor has not complied with the request, to the public agency and to the Contractor.

A notice complies with subparagraph 2 above, if it is sent to the public agency's custodian of public records and to the Contractor at the Contractor's address listed on its contract with the public agency or to the Contractor's registered agent. Such notices must be sent by common carrier delivery service or by registered, Global Express Guaranteed, or certified mail, with postage or shipping paid by the sender and with evidence of delivery, which may be in an electronic format.

A Contractor who complies with a public records request within eight (8) business days after the notice is sent is not liable for the reasonable costs of enforcement.

Section 19. Scrutinized Companies List

Pursuant to Sections 287.135, 215.4725, and 215.473, of the Florida Statutes which prohibits agencies from contracting with any company, principals, or owners on the Scrutinized Companies with Activities in Sudan List, participation in the Boycott of Israel, the Scrutinized Companies with Activities in the Iran Petroleum Energy List, and is not engaged in business operations in Cuba or Syria are prohibited from contracting for goods or services in any amount at the time of submitting to this RFP through the term of this contract, including renewals or extensions.

By signature of this agreement, Contractor certifies and attests that firm is not on any list, engaged in any business operations, or participates in activities as specified in this section. If firm is found negligent, contract shall be terminated; and submission of a false certification may subject firm to civil penalties, attorney's fees, and/or costs.

Section 20. Exhibits

The following Exhibits are attached to and made a part of this Contract:

“Exhibit A” - “Original Invitation to Bid as Issued by District, including all Addenda”

“Exhibit B” - “Bid as Submitted by Contractor and Accepted by District”

“Exhibit C” - “Performance Bond”

“Exhibit D” - “Insurance and Indemnification”

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

Signatures are on following page

SAMPLE

IN WITNESS WHEREOF, the parties hereto have accepted, made and executed this Agreement in counterparts each of which shall be treated as an original upon the terms and conditions above stated.

CONTRACTOR

Attest

Witnesses

NAME, TITLE

As to the DISTRICT on the ____ day of _____, _____.

MARTIN COUNTY SCHOOL DISTRICT

Attest

Witness

Marsha Powers, Board Chair

ALL DOCUMENTS EXHIBITS SHALL BE ATTACHED HERE

EXHIBIT “A”

**BID AS SUBMITTED BY CONTRACTOR AND
ACCEPTED BY DISTRICT**

EXHIBIT “B”

**ORIGINAL INVITATION TO BID (ITB)
AS ISSUED BY DISTRICT,
INCLUDING ALL ADDENDA**

EXHIBIT “C”

CERTIFICATES OF INSURANCE

EXHIBIT “D”

PERFORMANCE BOND



SECTION IX
MCSD PROJECT MANUAL SPECIFICATIONS

SECTION IX



ITB# 1009-0-2021/LD

ITB NAME: DISTRICT PLUMBING SERVICES

MCSD PROEJCT MANUAL SPECIFICATIONS

Purchasing Department
2845 SE Dixie Hwy
Stuart, FL., 34997-5037

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SECTION 22 00 01 PLUMBING SYSTEMS

PART 1 – GENERAL

1.1 GENERAL CONDITIONS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Refer to Division 1 for all requirements pertaining to General Provisions.
- C. Provide all the plumbing work in accordance with the Contract Documents.
- D. Contractor shall provide adequate training to school personal on the use, operation, and maintenance of plumbing systems.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Outside utilities 5'-0" beyond the building wall.
- B. Final connections to heating, ventilating and air conditioning equipment.
- C. Cutting and patching.
- D. All concrete foundations or bases.
- E. Mounting of all starters, except those specified to be factory-mounted and wired as part of the equipment. All wiring necessary to supply power to electric motors and remote operating valves, including connections from the disconnect switches and starters to the motors.
- F. Providing the wiring of all plumbing alarm devices excluding house pump controls from the alarm devices to an alarm panel.
- G. Motor disconnects switches and circuit breakers, except in combination starters and where otherwise noted.
- H. All finished painting of exposed pipes and apparatus.
- I. Domestic water meters and detector fire meter.
- J. Concrete pits for sump pumping units.
- K. Installation of access doors in finished construction furnished as the work of this Section.
- L. Flashing of roof drains and pipes penetrating the roof.
- M. Flashing of floor drains in membrane waterproofed floors.
- N. Excavation and backfilling.
- O. Extension of fire protection from valved outlets.
- P. Bracing and supports for hot water heaters.
- Q. Toilet accessories.
- R. Contractor shall provide adequate training to school personal on the use and maintained of plumbing systems.

1.3 WORK INCLUDED

- A. Plumbing Fixtures and Trim.
- B. Sanitary Waste and Vent Systems.
- C. Water Supply System.
- D. Storm Drainage System.

1.4 DESCRIPTION OF SYSTEMS

- A. Provide all plumbing fixtures and trim as indicated on the drawings and as specified elsewhere herein. All fixtures shall be connected to the plumbing systems as indicated and required for proper operation. Piping materials, accessories, and equipment shall be as specified elsewhere in Division 22.
- B. Sanitary Waste and Vent Systems:
 - 1. Provide a complete sanitary, waste and vent system for all fixtures and equipment in the building requiring connections.
 - 2. All waste from the building shall discharge by gravity from the building to 5ft. outside of building as shown on the drawings.
- C. Water Supply System:
 - 1. Provide a complete water supply system for all fixtures and equipment in the building including domestic water heaters.
 - 2. The domestic water system shall connect to 5'-0" outside of building as shown on the plans.
 - 3. Local connections to fixtures and equipment shall be not less than full size of the fittings on the fixtures and equipment, and runouts and risers serving same shall be as shown and not less than one pipe size larger than the fittings on the fixtures and equipment.
 - 4. Provide stop-and-waste valves or ball valves at every branch off water mains where accessible and provide approved gate or compression stops at every connection to fixtures and equipment.
 - 5. Provide shock arresters in accordance with the Plumbing and Drainage Institute Standard PDI-WH201. Provide access door at each location of shock arrester. All shock arresters shall comply with ANSI A112.26.1-1969 (R1975). Coordinate access door locations with the architect.
 - 6. Pressure gauges shall be provided, on the inlet and outlet of all pumps, at the connection to each piece of equipment connected to by the plumbing contractor and at the main service valve in the building. Gauges shall be as specified herein.
 - 7. Thermometers shall be provided, on the inlet and outlet of each water heater, HWR pipe at the discharge of the circulator pump. Thermometers shall be as specified herein.
- D. Storm Drainage System:
 - 1. All drain connections to the building storm water system at the lower levels subject to backflow shall be equipped with back water valves.
 - 2. Insulate floor drains receiving cold condensate for a minimum distance of 20'-0" to the vertical stack.

PART 2 - PRODUCTS

2.1 SHOCK ARRESTERS

- A. Shock arresters shall be stainless steel, welded nesting type expansion bellows as manufactured by Sioux Chief, Zurn, or Josam. Provide access panels.

2.2 BACKFLOW PREVENTERS

- A. 3/4" thru 2" reduced pressure zone backflow preventers shall be equal to Watts 909 Series with 900AG air gap piped to drain.
- B. 2-1/2" thru 10" reduced pressure zone backflow preventers shall be equal to Watts 909 Series with 909AG air gap piped to drain.
- C. Double check valve assembly shall be equal to Watts 709 with UL/FM resilient seated OS&Y valves.

PART 3 – EXECUTION

3.1 PIPING WORK - INSTALLATION

- A. The drawings shall be followed where they are definite and provided such procedure causes no objectionable conditions or does not conflict with other trades, laws, regulations, or recommendations of equipment manufacturers. The drawings are intended to indicate the sizes of piping connections, and if certain sizes are omitted or unclear, obtain additional information before proceeding.

3.2 STERILIZATION OF PIPING AND EQUIPMENT

- A. After all domestic cold water and hot water supply and return piping has been flushed free of foreign matter, and within 30 days prior to turning the building over to the Owner, this piping shall be sterilized in accordance with Section 22 11 17 – Disinfection of Domestic Water Lines.

END OF SECTION

SECTION 22 02 00
BASIC MATERIALS AND METHODS FOR PLUMBING SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Refer to Division 1 for all requirements pertaining to General Provisions.

1.2 WORK INCLUDED

- A. Piping and equipment identification.
- B. Electrical requirements.
- C. Painting.
- D. Concrete work.
- E. Fabricated steel supports.
- F. Excavation, trenching and backfilling.
- G. Placing of equipment.

1.3 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this Section to the extent referenced.
 - 1. American Institute of Steel Construction (AISC) Publications
 - 2. American National Standards Institute (ANSI) Standards
 - 3. American Society for Testing and Materials (ASTM) Publications
 - 4. American Welding Society (AWS) Publications
 - 5. Underwriters Laboratories, Inc. (UL) Standards

1.4 SUBMITTALS

- A. Where submittals are required, comply with Division 1.
- B. Shop Drawings: Submit drawings of fabricated steel supports where proposed supports are not in accordance with details on drawings, or where drawings do not detail supports. Submittal for acceptance is required.
- C. Product Data: Submittal for other than fabricated steel supports are not required. Product data for the following shall be included in the operation and maintenance manuals. Submittal for acceptance is not required.
 - 1. Piping and equipment identification.

PART 2 – PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Piping and Equipment Identification:
 - 1. Communications Technology Corp.
 - 2. Craftmark Identification Systems, Inc.
 - 3. EMED Co., Inc.

4. Florida Marking Products, Inc.
5. Marking Services, Inc.
6. Seton Name Plate Corp.
7. W.H. Brady Co., Signmark Division

2.2 FABRICATION

A. Piping and Equipment Identification:

1. Pipe markers: Sub-surface printed plastic, with protective undercoating. Markers shall be permanently curled for snap-on installation for pipe sizes (including insulation) up to 6" diameter. For external diameters above 8". Marker shall be secured using cable ties for indoor use and stainless steel banding or ultraviolet resistant plastic for exterior use. Markers for outdoor installation shall be over-laminated with Tedlar™ on polyester ultraviolet to avoid damage and fading. Markers shall identify the pipe contents and direction of flow through 360 degree visibility range. Marker size, letter size, letter color, wording and background color shall be in accord with ANSI A13.1 – Scheme for the Identification of Piping Systems. Based on Marking Services Inc. Model MS-970 Coiled Plastic Markers for indoor use and Model MS-995 Maxilar Marker for exterior use.
2. Valve tags: Contractors Option:
 - a. Indoor:
 - 1) 19 gauge brass, 1-1/2 inch round, with 1/4 inch high black pipe service letter abbreviation above 1/2 inch high black valve number. Pipe service letter abbreviation shall be in accord with legend on drawings. Valve tag attachment shall be 4 ply 0.018 copper wire meter seal or #6 solid brass bead chain with locking link. Based on Marking Services Inc.
 - 2) 1/16 inch thick plastic, 1-1/2" round, with ¼ inch high black pipe service abbreviation above 1/2 inch high black valve number. Pipe service letter abbreviation shall be in accord with legend on drawings. Color of valve tag shall match pipe marker color. Valve tag attachment shall be 4 ply 0.018 copper wire meter seal or #6 solid brass bead chain with locking link. Based on Marking Services Inc.
 - b. Outdoor Service:
 - 1) 19 gauge brass, 1-1/2 inch round, with 1/4 inch high black pipe service letter abbreviation above 1/2 inch high black valve number. Pipe service letter abbreviation shall be in accord with legend on drawings. Valve tag attachment shall be 4 ply 0.018 copper wire meter seal or #6 solid brass bead chain with locking link. Based on Marking Services Inc.
 - 2) 19 gauge Type 304 stainless steel, 1-1/2" round, with ¼ inch high pipe service abbreviation above 1/2 inch high black valve number. Pipeservice letter abbreviation shall be in accord with legend on drawings. Color of valve tag shall match pipe marker color. Valve tag attachment shall be 4 ply 0.018 stainless wire meter seal or #6 Type 304 stainless steel bead chain with locking link. Based on Marking Services, Inc.

3. Valve chart frame: Self-closing, satin-finished, extruded aluminum with glass window, 8-1/2 inch by 11 inch chart size.
4. Equipment nameplates:
 - a. Indoor: Shall be 1/16 inch thick plastic with black satin surface and white core. Lettering shall be engraved through the surface color to expose the core color. Plate size shall be a minimum of 2-1/2 inch by 4 inch, with 3/4 inch high lettering for equipment and 3/4 inch by 2-1/2 inch, with 3/16 inch high lettering for ceiling grid labeling. Equipment identifying name and number shall be in accord with schedules on the Contract Documents. Plate manufacturer shall furnish pre- drilled hole locations for pop riveting. Where pop riveting is not suitable, a suitable adhesive for permanently attaching plate to equipment shall be provided.
 - b. Outdoor: Shall be 125 Mil rigid plastic constructed of printed legend sealed between two layers of chemically-resistant plastic to resist ultraviolet damage. Plate size shall be a minimum of 2-1/2 inch by 4 inch, with 3/4 inch high lettering for equipment. Equipment identifying name and number shall be in accord with schedules on the Contract Documents. Plate manufacturer shall furnish pre- drilled hole locations for pop riveting. Where pop riveting is not suitable, a suitable adhesive for permanently attaching plate to equipment shall be provided.
 - c. Based on Marking Services Inc. Model MS-215 Max-Tex.
- B. Electrical Requirements: Refer to Division 26 for requirements
- C. Painting: Product specified in Division 9 - FINISHES.
- D. Concrete Work:
 1. Concrete is provided under DIVISION 3 - CONCRETE.
 2. This contractor to provide detailed dimension drawings, including anchor bolt locations where required for all bases and pads required for equipment furnished under this Division.
 3. Concrete for equipment bases and pads shall be 3000 p.s.i. design mix prepared in accord with ASTM C94. Cement shall be in accord with ASTM C150. Aggregate shall be fine sand in accord with ASTM C33. Water shall be clean, fresh, and drinkable.
- E. Fabricated Steel Supports:
 1. Steel angles, channels, and plate shall be in accordance with ASTMA36.
 2. Steel members, including fasteners, exposed to weather shall be galvanized.
- F. Excavation, Trenching, and Backfilling: Product description not applicable.
- G. Placing of Equipment: Product description not applicable.

PART 3 – EXECUTION

3.1 GENERAL

- A. Installation of materials and equipment shall be in accord with the manufacturer's written instructions, except as specified.

3.2 INSTALLATION

A. Piping and Equipment Identification:

1. Install pipe markers adjacent to each valve and fitting, at each branch connection, on each side of wall, floor, and ceiling penetrations, where entering and leaving underground areas, and at minimum 40 foot spacing on horizontal and vertical pipe runs. Markers shall be arranged for easy reading at eye level.
2. Provide valve tags on all valves exposed or concealed unless otherwise noted.
3. Attach valve tag to stem of each valve to be tagged. Valve numbers shall follow in sequence the Owner's existing valve numbers, where applicable.
4. Provide a marker for each valve and equipment to be tagged, located above lift-out tile ceilings. The marker shall be 1/16 inch thick plastic with a satin surface and white core. Color of the marker shall match color of piping identification system. Lettering shall be engraved through the surface color to expose the core color. Plate size shall be 3/4 inch by 2-1/2 inch, with 3/16 inch high lettering for ceiling grid labeling. Plate manufacturer shall furnish suitable adhesive for permanently attaching plate to ceiling grid.
5. Provide a minimum of 4 valve charts. Chart information shall indicate job name, Contractor name, date of installation, valve number, valve location, valve type, valve purpose, and system in which installed. Mount framed chart in equipment room and insert copy of chart in each operating and maintenance manual under separate tabbed section labeled "Valve Chart". Where project drawings include a piping flow schematic, request AutoCAD file from Engineer and label all of the valves according to the valve chart and frame in an 18" x 24" frame in main mechanical or pump room.
6. Permanently affix nameplate to each item of equipment using stainless steel pop rivets. Where irregular surface impedes direct attachment of plates, affix plate to sheet metal bracket and attach bracket to equipment with screws, bolts or suitable adhesive from nameplate manufacturer.

B. Electrical Requirements: All work as provided under Division 26.

C. Painting:

1. All equipment shall be furnished with a factory- applied galvanized, prime paint, or finish paint finish. Touch-up damaged surfaces of equipment immediately.
2. Paint for galvanized surfaces shall be in accordance with ASTM A780 using zinc rich compound.
3. Paint wooden mounting backboards with two coats of gray enamel prior to making attachments to the board.
4. For quality control refer to DIVISION 9 - FINISHES.
5. Remove all dirt, rust, scale, grease, pipe dope, solder flux, and welding slag from all surfaces to be painted.
6. Paint immediately, under this Division, all damaged galvanized surfaces. Paint galvanized metal surfaces behind grilles with two coats of flat black paint.
7. Apply rust inhibitive primer to ferrous surfaces of shop fabricated steel supports.
8. Paint immediately under this division all field and shop welded joints in piping or equipment supports with 2 coats of grey metal primer.

D. Concrete Work: All work as provided by Division 3.

- E. Fabricated Steel Supports:
1. Because of the small scale of the drawings, details of equipment support are not always shown. It shall be the responsibility of the contractor to provide supports as required for safe and adequate support.
 2. Fabricated steel supports and ladders may be shop or field-fabricated and shall be in accord with details on drawings.
 3. When details are not indicated, the contractor shall submit proposed support detail for review. The contractor shall bear all cost in producing this detail in the bid. This includes but is not limited to structural engineering support.
 4. Steel members shall be saw cut, with corners ground smooth, and shall be assembled with welded or bolted connections at Contractor's option. Connections shall be in accord with specified AISC Publications.
- F. Excavation, Trenching, and Backfilling: Excavation, trenching, and backfilling for site utility piping systems specified in DIVISION 31.
- G. Placing of Equipment:
1. Coordinate setting of equipment with the requirements of other trades so as to avoid conflicts and to insure compatibility. Equipment shall not block access for installation of other equipment.
 2. Set base mounted equipment on permanent and finished supports. Temporary support, if any, shall be removed prior to making final pipe, duct, or electrical connections to equipment.
 3. Adjust suspended equipment to final elevation prior to making pipe, duct or electrical connections.
 4. Exercise caution during equipment placing operations to ensure that structure is not overloaded.
 5. Do not move heavy equipment across floor or roof of insufficient load bearing capacity to support such equipment. Provide bracing or shoring as required or use crane to place equipment directly on permanent and finished support.
 6. Secure all roof mounted equipment to the structure adequately to resist overturning, uplift and sliding forces for basic wind speeds indicated for this location in Figure 1609 of the Florida Building Code, Latest Edition.

END OF SECTION

SECTION 22 05 00
COMMON WORK RESULTS FOR PLUMBING SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Comply with Sections 01 33 00 – Submittal Procedures and 01 60 00 – Material Equipment and Approved Equals.

1.2 ARTICLES INCLUDED

- A. Definitions.
- B. Permits, Fees and Notices.
- C. Applicable Publications.
- D. Code Compliance.
- E. Scope of Work.
- F. Record Drawings.
- G. Intent of Drawings and Specifications.
- H. Quality Assurance
- I. Submittals.
- J. Product Requirements - Equals and Substitutions.
- K. Manufacturer's Instructions.
- L. Transportation and Handling.
- M. Storage and Protection.
- N. Cutting, Patching and Demolition.
- O. Cleaning Up/Removal of Debris.
- P. Operating and Maintenance Manuals.
- Q. Training of Owners Operators.
- R. Guarantee of Work.
- S. System Testing.

1.3 ARTICLES

- A. Definitions:
 - 1. The term "As indicated" means as shown on drawings by notes, graphics or schedules, or written into other portions of contract documents. Terms such as "shown", "noted", "scheduled" and "specified" have same meaning as "indicated" and are used to assist the reader in locating particular information.
 - 2. The term "Provide", means furnish and install as part of the work covered in Division 22.
 - 3. The term "Furnish" means furnish only, for installation, as part of this contract, by other Divisions.
 - 4. The term "Install only" means to install under the work of Division 22 equipment furnished by other Divisions, or by the Owner.
 - 5. The term "Owner's Representative" when referenced herein shall be the Architect or the Engineer acting as his designated representative unless otherwise noted.

6. The term "design" as it pertains to the work of this division shall describe the basic intent, component sizing, component relationships and overall architecture of the Plumbing system. The design is generally schematic in nature and will require specific detailing after the accepted products are determined.
 7. The term "detail" as it pertains to the work of this division shall describe the work required by the contractor to assure a fully coordinated installation of the material and equipment supplied. When requested, the contractor shall produce detailed shop drawings or sketches indicating the actual placement of the equipment or material supplied; also including how the equipment or material interfaces with work of other sections or divisions within the contract documents.
 8. The term "workman-like manner" as it pertains to the work of this division shall describe a neat well organized high quality installation system (piping, etc.). Routing shall be well thought out providing adequate service clearance and maximum use of space. Equipment placement shall exhibit proper clearances for service. All lines (piping, etc.) shall be run straight and true, parallel, or perpendicular to building structure neatly supported.
 9. For additional definitions refer to the General Conditions.
- B. Permits, Fees and Notices: Comply with the General Conditions.
- C. Applicable Publications:
1. Publications listed in each Section form a part of that Section to the extent referenced.
 2. When a standard is specified by reference, comply with requirements of that standard, except when requirements are modified by the Contract Documents, or applicable codes establish stricter standards.
 3. The Publication or Standard is the publication in effect as of the bid date, except when a specific date is listed.
- D. Code Compliance:
1. Life Safety Code - NFPA 101
 2. Florida Building Code, 7th Edition (2020)
 3. Florida Accessibility Code, 2020
 4. National Electrical Code 2017
 5. Florida Plumbing Code, 7th Edition (2020)
 6. State Requirements for Educational Facilities (SREF), 2014
 7. NFPA Standards, Latest Edition.
- E. Scope of Work: The work to be performed under this Division consists of the satisfactory completion of all PLUMBING as indicated in the Contract Documents.
- F. Record Drawings: Comply with the General Conditions.
- G. Intent of Drawings and Specifications:
1. The intent of the drawings and specifications is to establish minimum acceptable quality standards for materials, equipment, and workmanship, and to provide operable plumbing systems complete in every respect.
 2. Existing conditions, dimensions, etcetera, depicted on the drawings are taken from the "as-built" drawings of the original construction supplemented by field observation. The contractor is cautioned to field verify all existing conditions, dimensions, etcetera, notifying the Owner's Representative of any discrepancies other than those minor in nature, for direction, prior to ordering or fabricating equipment or materials. Anything mentioned in the

specifications and not shown on the drawings or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. In case of difference between drawing and specifications, the more stringent shall govern, unless the discrepancy conflicts with applicable codes, wherein the code shall govern. The drawings are diagrammatic, intending to show general arrangement, capacity, and location of system components, and are not intended to be rigid in detail. Final placement of equipment, other system components, and coordination of all related trades shall be the contractor's responsibility.

3. Due to the small scale of the drawings, and to unforeseen job conditions, all required offsets and fittings may not be shown but shall be provided at no additional change in contract cost.
4. In the event of a conflict, the Owner's Representative will render an interpretation in accordance with the General Conditions.

H. Quality Assurance:

1. All equipment furnished under this Division shall be listed and labeled by U.L., ETL or a nationally recognized testing laboratory (NRTL).
2. Material furnished under this Division shall be standard catalogued products of recognized manufacturers regularly engaged in the production of such material and shall be the latest design.
3. Materials shall be the best of their respective kinds. Materials shall be new except where the specifications permit reuse of certain existing materials.
4. Work provided for in these specifications shall be constructed and finished in every part in a workmanlike manner.
5. All items necessary for the completion of the work and the successful operation of a product shall be provided even though not fully specified or indicated on the drawings.
6. All work to be performed by qualified and experienced personnel specifically trained in their respective field.
7. All work of this division shall be carefully interfaced with the work of other divisions to assure a complete, functioning system or systems.

I. Submittals:

1. In addition to all other submittal requirements elsewhere in the contract documents, the contractor shall comply with the following.
2. Submittal for acceptance is required only on those items specifically requested in the specification section that applies.
3. For products and equipment that do not require a submittal for acceptance, submit a separate letter for each specification section certifying that all products and equipment will be provided in compliance with the contract documents.
4. Provide submittal data in accordance with the General Conditions and/or as listed below.
5. Designate in the construction schedule, or in a separate coordinated schedule, the dates for submission and the dates that the submittals will be needed in order to meet construction schedule. This schedule shall be submitted prior to or in conjunction with the first submittal. Processing of submittals may be delayed pending the receipt of this schedule at the reviewer's discretion.
6. Submittal data shall be presented in a clear and thorough manner and referenced to the specification section.

- a. Where applicable, data shall be identified by reference to sheet and detail, schedule or room numbers, equipment or unit number as shown on Contract Drawings.
7. Prepare performance and product data as follows:
 - a. Clearly mark each copy to identify pertinent products or models, delete non-pertinent data.
 - b. Show performance characteristic and capacities.
 - c. Show dimensions and clearances required.
 - d. Show wiring or piping diagrams and controls.
 - e. Clearly list any deviation in the submittals from the requirements of the contract documents.
 - f. Include installation requirements.
8. Manufacturer's standard schematic drawings and diagrams:
 - a. Modify drawings and diagrams to delete information not applicable to the work of this project.
 - b. Supplement standard information to provide information specifically applicable to the work of this project.
9. Prohibition of Asbestos and PCB:
 - a. The use of any process involving asbestos or PCB, and the installation of any product, insulation, compound of material containing or incorporating asbestos or PCB, is prohibited. The requirements of this specification for complete and operating mechanical systems shall be met without the use of asbestos or PCB.
 - b. Prior to the Final Review field visit the Contractor shall certify in writing that the equipment and materials installed in this Project under this Division 22 contain no asbestos or PCB. Additionally, all manufacturers shall provide a statement with their submittal that indicates that their product contains no asbestos or PCB. This statement shall be signed by a duly authorized agent of the manufacturer.
10. Letter of Certification: Where a submittal is not required, provide letter certifying that the work will be completed in strict accordance of the specified requirements. In the event the contractor wishes to alter the requirements of the specification for whatever reason, this should be clearly explained in this letter noting that this alteration may require additional submittal requirements.
11. Schedules: Where schedules are called for, submit schedule indicating which products will be used and to what extent by system, location, size, etc.
12. Where samples are requested, samples shall be of sufficient size and quantity to clearly illustrate:
 - a. Functional characteristics of the product, with integral related parts and attachment devices.
 - b. Full range of color, texture, and pattern.

- c. Where a mock-up is specified, erect at the Project site, in a location acceptable to the Owner's Representative. Size or area shall be that specified or as agreed upon during pre-construction or other job site meetings.
 - d. Where mock-up is not a permanent part of the installation, remove mock-ups at conclusion of work or when acceptable to the Owner's Representative.
13. The Contractor shall:
- a. Review Shop Drawings, Product Data and Samples prior to submission.
 - b. Determine and verify:
 - 1) Field measurements.
 - 2) Field construction criteria.
 - 3) Catalog numbers and similar data.
 - 4) Conformance with specifications.
 - 5) All submittals have been properly interfaced with the requirements of this and other divisions of work so as to assure a complete, functioning system in accordance with the contract documents.
 - c. Coordinate each submittal with requirements of the work and of the Contract Documents.
 - d. Clearly identify any deviations in the submittals from requirements of the Contract Documents. Any deviations not specifically disclosed in the submittal shall be solely at the risk of the Contractor and shall be subject to discovery at any time. Any undisclosed deviations shall be corrected by the Contractor to comply with the requirements of the Contract Documents at no cost to the Owner regardless of the action code accorded the submittal by the Owner's Representative.
 - e. Do not release equipment for shipment, begin fabrication or work on any items requiring submittals for acceptance until all submittals are returned with the Owner's Representative acceptance.
 - f. Make submittals promptly, and in such sequence as to cause no delay in the work or in the work of any other contractor.
14. Number of Submittals: Comply with the Division 1, Specification Section 01 33 00 – Submittal Procedures.
15. Submittals shall contain:
- a. The date of submission and the dates of any previous submissions.
 - b. The Project title and number.
 - c. Contract identification.
 - d. The names and phone numbers including personal contact of:
 - 1) Contractor.
 - 2) Supplier.
 - 3) Manufacturer.
 - e. Identification of the product, with the specification section number and contract document description clearly indicated.
 - f. Field dimensions clearly identified as such.
 - g. Relation to adjacent or critical features of the work or materials.
 - h. Applicable standards.
 - i. Identification of deviations from Contract Documents.
 - j. Identification of revisions on re-submittals.
 - k. Contractor's stamp, initialed or signed, certifying to review of submittal, verification of products, field measurements and field construction criteria,

- and coordination of the information within the submittal with requirements of the work and of Contract Documents.
- I. Each submittal shall be limited to a single specification section. Submittals shall not be grouped with other sections in common binders or under common control sheets except as defined in paragraph m. below. Each submittal shall have a cover/control sheet containing the information listed above (a thru k) and have a minimum of 8" x 3" clear space for the general contractors, engineers and architects review stamp.
 - m. The first group of submittals shall be sent in a minimum of one (or if required) two hard cover view type 3-ring binder(s) White, sized to hold 8-1/2" x 11" sheets:
 - 1) Binder is to be adequately sized to comfortably hold required submittals. Minimum spline size to be 1", maximum spline size to be 3" (provide additional binders if 3" size is not sufficient to properly hold submittals).
 - 2) Binder cover and spline to have outer clear vinyl pockets. Provide correct designation of project in each pocket. Description sheets are to be white with black letters, minimum of 11" high and full width of pocket. Description is to describe project and match project drawing/project manual description.
 - 3) Submittals not complying with these requirements may be returned with no action taken at the reviewer's discretion.
16. Re-submittals shall contain:
- a. The date of re-submission and the dates of all previous submissions.
 - b. A copy of the Engineer's comments from the previous submittal.
 - c. An itemized response to each of the Engineer's comments specifically outlining the changes or corrections being made. As an example, this could be either noting the page(s) of the previous submission that are affected and what changes have been made or noting specific additional information being provided.
 - d. Submittals not complying with these requirements may be returned with no action taken at the reviewer's discretion.
 - e. Turnaround time and copies as indicated in Section 01 33 00 – Submittal Procedures.
17. The Owner's Representative will (if they so desire):
- a. Review submittals promptly and where special attention is requested, review in accordance with the schedule required.
 - b. Review the submittal for general compliance with the contract documents. The contractor is responsible for quantities, dimensions, placement of the product, coordination with all other trades occupying the space, maintain service clearance, function, and compliance with the written installation instructions.
 - c. Determine the appropriate action for the submittal. Action codes will be as follows:
 - "NO EXCEPTIONS TAKEN" - Copies will be distributed as indicated under above schedule.

- "NOTE MARKINGS/CONFIRM" - Final but Restricted Release; General Contractor may proceed with fabrication, taking into account the necessary corrections on submittal and with Contract Documents. General Contractor must submit a confirmation letter to remove restriction and allow shop drawings on the project site. A sample of a confirmation letter is enclosed herein.
 - "NOTE MARKINGS/RESUBMIT" - General Contractor may proceed with fabrication, taking into account the necessary corrections. Corrected shop drawings shall be resubmitted before fabrication of this work is complete to obtain a different action marking. Do not allow drawings marked, "Resubmit" to be used in connection with installation of the Work.
 - "REJECTED/RESUBMIT" - General Contractor will be required to resubmit shop drawings in their entirety. No fabrication or installation shall be started until shop drawings so marked have been completely revised, resubmitted, and marked by Architect according to preceding Paragraphs a. or b.
- d. Turnaround time will be per Division 1.
 - e. Review comments will be per Division 1.
18. Resubmission requirements for "as specified" products.
- a. Make any corrections or changes in the submittals required by the Owner's Representative and resubmit until accepted.
 - b. A submittal shall only be reviewed a maximum of 3 times. If upon the second resubmission an accepted action cannot be rendered (No Exceptions Noted or Make Corrections as Noted), the contractor shall supply the basis of design product and bear all costs incurred by the Engineer during the review process until an accepted submittal is achieved.
19. The Contractor shall maintain one copy of all accepted submittal data including letters of compliance in a job site file.
- J. Product Requirements, Equals and Substitutions:
- 1. In addition to all other requirements for submittals, equals and substitutions elsewhere in the contract documents, the contractor shall comply with the following.
 - 2. Product Requirements:
 - a. The specifications sections under Article 2.1 "ACCEPTABLE MANUFACTURER", lists suppliers found acceptable for this project. The names listed are manufacturers who meet the minimum acceptable standards that this project dictates. The list is furnished as a guide. Even though a manufacturer is named, he must still provide the type and quality of equipment specified as well as equipment that will fit within the allotted space and within the design weight allowance, etc. Being named does not imply permission for that manufacturer to provide an alternative product or design. Other manufacturers not named will be considered to be equal providing they furnish a product of the type and quality specified.
 - b. In certain cases, foundations and/or structural supports or electrical requirements for equipment specified in this Division are provided under other divisions of the specifications. Where an alternate

acceptable manufacturer's product is provided, this contractor shall coordinate the revised requirements and include an allowance for any cost differential.

- c. If the list, under Article 2.1 "ACCEPTABLE MANUFACTURERS" names only one manufacturer followed by "No Substitutions" that product shall be supplied.
3. Substitutions: *Comply with the General Conditions, but the following are in addition to:*
- a. A substitution is defined as any product not meeting the requirements as outlined in PART 2 - PRODUCTS. A different design accomplishing the same result will be considered a substitution. The same design requiring a larger motor, or more space or a structural change to accommodate larger weight, etc., will be considered a substitution. If a manufacturer who is not listed as an "ACCEPTABLE MANUFACTURER" wants to have his product considered as an equal or as a substitution, he shall submit details to the Engineer 10 days in advance of bid date and a decision will be rendered. If necessary, a clarification will be issued in the form of an Addendum. No substitution requests shall be considered after the Bid.
 - b. Submit a separate request for each product, supported with complete data, with drawings and samples as appropriate, including.
 - 1) Comparison of the qualities of the proposed substitution with that specified in tabulated format.
 - 2) Changes required in other elements of the work because of the substitution.
 - 3) Effect on the construction schedule.
 - 4) Cost, extra credit or statement of no change in contract price.
 - 5) Any required license fees or royalties.
 - 6) Availability of maintenance service, and source of replacement materials.
 - c. The Engineer shall be the judge of the acceptability of the proposed substitution.
 - d. A request for a substitution constitutes that the Contractor:
 - 1) Has investigated the proposed product and determined that it is equal to or superior in all respects to that specified.
 - 2) Will provide the same warranties for the substitution as for the product specified.
 - 3) Will coordinate the installation of the substitution into the work and make such other changes as may be required to make the work complete in all respects.
 - 4) Waives all claims for additional costs, under his responsibility, which may subsequently become apparent.
 - 5) Will absorb all costs incurred by the substitution when affecting other trades including but not limited to electrical, structural, architectural, etc.
 - 6) Will absorb any cost incurred by the Engineer in review of the substituted product if the acceptance of the substituted item creates the need for system modification and/or redesign, or if the substituting contractor exhibits negligence in his substituting procedure thus submitting inferior, misapplied or miss-sized

equipment. In the event of additional engineering costs, the billing structure shall be agreed upon prior to review by all involved parties.

4. Engineer will review requests for substitutions with reasonable promptness, and will issue an addendum or notify Contractor, in writing, of the decision to accept or reject the requested substitution.
 5. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or if acceptance requires revision to the contract documents.
 6. The engineer will review substitution submittals for compliance a maximum of two times. If the submittal or substituted product does not comply with the contract documents on the second submittal, the submittal and product will be rejected and the specified product will be required.
 7. The contractor may request further review of the substitution after the second submittal rejection if the contractor agrees in writing to accept responsibility for the cost of additional review time and expenses by the Engineer.
 8. In the event a substitution is rejected, supply the products which constituted the basis of design at no change in the contract price.
 9. Installation of substitutions without the Owners approval shall be cause of immediate rejection and removal without extra cost to the Owner.
- K. Manufacturer's Instructions:
1. Installation of work shall comply with manufacturer's printed instructions.
 2. Should job conditions or specified requirements conflict with manufacturer's instructions, consult with Engineer for clarification. Do not proceed with work without clear instructions.
- L. Transportation and Handling: Comply with General Conditions.
- M. Storage and Protection:
1. Store products in accord with manufacturer's instructions, with seals and labels intact and legible.
 2. Store products to prevent damage by the elements. Space temperature shall be controlled as required to prevent condensation and metal corrosion or damage to electrical or electronic parts are the result of condensation.
 3. Arrange storage in a manner to provide easy access for inspection. Make periodic inspections of stored products to assure that products are maintained under specified conditions, and free from damage or deterioration.
 4. Provide protection as necessary to prevent damage after installation.
 5. Products which suffer damage due to improper storage shall not be installed and if found in place, shall be removed and replaced at the contractor's expense.
- N. Cutting and Patching: Comply with the General Conditions.
- O. Cleaning Up/Removal of Debris:
1. Comply with the General Conditions.
 2. Maintain a clean work area. Construction debris shall be immediately removed from all newly erected work.
- P. Operating and Maintenance Manuals: Comply with the General Conditions, but the following are in addition to:
1. Quantity: Comply with the General Conditions.

2. Format: Adequately sized for contents, minimum 1" and maximum 3" spline size, hard cover, view type, 8-1/2" x 11 loose leaf binders. Binder covers to have outer clear vinyl pocket on front cover and spline. Provide correct project designation and contents description in each pocket. Use as many as required. Do not overload binders.
3. Content:
 - a. Cover sheet.
 - b. Table of contents (as follows):
 - 1) Description of systems.
 - 2) Design parameters.
 - c. Point by Point System Check-out: Provide tabulated results indicating compliance with contract document requirements.
4. Detailed Preparation Requirements:
 - a. The cover sheet shall list project name, location, architect, structure engineer, mechanical engineer and electrical engineering firm name with address, telephone number and project manager's name for this project.
 - b. Each major heading in the table of contents shall have a large distinctive, clearly marked, non-erasable, plastic encased tab.
 - c. The description of systems will be provided by the design engineer for insertion at the time of review and turn-over to owner. This description of systems will be an updated version of the narrative included in this Section and will be an overview of the entire system. It will be the basis for the starting of the owner's instruction program.
 - d. Each section shall have the following sub-tabs. Sub-tabs shall be similar to the main tabs but of a different color.
 - 1) Specifications: The specification shall be copied and inserted complete with all addenda.
 - 2) Submittal: This section shall include all accepted submittal data. If submittal was not required, include technical data as specified.
 - 3) Installation Instructions: If the product, such as pipe, etc., does not have any written installation instructions, include a statement "Manufacturer's Written Installation Instructions Not Available - Product Installed in Accordance with Specifications and Good Practice".
 - 4) Operation and Maintenance Instructions: These shall be the written manufacturer's data edited to omit reference to products or data not applicable to this installation.
 - 5) Parts List: These shall be edited to omit reference to items not applying to this installation.
 - 6) Equipment Supplier: This section shall include the name, address and telephone number of the manufacturer's agent and/or service agency supplying or installing and starting up of the equipment.

- 7) System Description: This section shall include that portion of the overall description included in the beginning of the manual as it applies to each sub-section. In sections such as pipe, valves and fittings, a statement shall be included "Not Applicable to this Section." Data for this section will be added by the design engineer when the manuals are submitted for review and forwarded to the owner.
- Q. Training of Owners Operators:
1. The manufacturer shall provide a comprehensive training outline for the Owner & Engineer to review within 90 days of final completion.
 2. The manufacturer & contractor shall provide training on the plumbing system, plumbing fixtures and all water heating systems, per the table below.
 3. The owners shall be given comprehensive training in the understanding of the systems and the operation and maintenance of each major piece of equipment.
 4. The contractor shall be responsible for scheduling the training which shall start with classroom sessions followed by hands on training on each piece of equipment. Hands on training shall include start-up, operation in all modes possible, shut-down and any emergency procedures.
 5. The manufacturer's representative shall provide the instructions on each major piece of equipment. These sessions shall use the printed installation, operation and maintenance instruction material included in the O&M manuals and shall emphasize safe and proper operating requirements and preventative maintenance.
- R. Guarantee of Work:
1. Comply with the General Conditions.
 2. Where applicable, furnish manufacturer's written warranty for materials and equipment.
 3. Insert warranties in appropriate locations in operating and maintenance manuals.
 4. Materials and equipment having seasonal operation limitations, shall be guaranteed for a minimum of one year from date of seasonally appropriate test, and acceptance in writing by the Owner, unless specific Division 22 specifications specify a longer period.
- S. System Testing:
1. Provide all necessary labor, materials, and equipment to successfully complete all system testing necessary for building occupancy and owner acceptance.
 2. Provide all necessary labor, materials, and equipment to assist contractors of other division to complete system testing necessary for building occupancy and owner acceptance, wherever an inter-relationship between Division 22 and the work of other divisions exists.
 3. Tests shall be repeated as necessary until all occupancy and operation permits are granted and the owner accepts the project.

Martin County School District

PART 2 – PRODUCTS

Not Applicable

PART 3 – EXECUTION

Not Applicable

END OF SECTION

SECTION 22 05 19
METERS AND GAGES FOR PLUMBING PIPING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Refer to Division 1 for all requirements pertaining to General Provisions.

1.2 WORK INCLUDED

- A. Thermometers and Accessories.
- B. Pressure Gauges and Accessories.
- C. Pressure and Temperature Test Ports.
- D. Install Miscellaneous Control Devices.

1.3 SUBMITTALS

- A. Submit schedule of all products used. Include make, model and size. When multiple products will be used, generic size and flow range will be acceptable.
- B. Product data, along with installation operation and maintenance instructions, shall be included in the operation and maintenance manuals.
- C. Refer to Division 1 for submittal requirements.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Thermometers and Accessories:
 - 1. Duro Instrument Corp.
 - 2. Taylor
 - 3. H.O. Trerice
 - 4. Weiss
 - 5. Weksler
 - 6. Winter's ThermoGauges
- B. Pressure Gauges and Accessories:
 - 1. Ashcroft
 - 2. Duro Instrument Corp.
 - 3. H.O. Trerice
 - 4. Weiss
 - 5. Weksler
 - 6. Winter's Thermogauges
- C. Pressure and Temperature Test Ports:
 - 1. Peterson Equipment Co., Inc.
 - 2. Sisco P/T Plugs
 - 3. Or equal

2.2 FABRICATION

A. Thermometers and Accessories:

1. Industrial Reading Non-Mercury Type:
 - a. Construction: Adjust angle, 9" scale with lagging extension brass well, of the blue fill type and guaranteed accurate to \pm one scale division. Thermometer shall have glass front to exclude dirt and dust. Thermometers containing mercury are not acceptable. Thermometers installed outdoors shall be specifically designed and weatherproofed for this application.
 - b. Stem Length:
 - 1) 6" pipe and smaller: 3-1/2"
 - 2) 8" to 12" pipe: 6"
 - 1) For storage tanks: 9"
 - c. Ranges:
 - 1) Chilled and condenser water 0 to 120°F or 0 to 100°F as available.
 - 2) Domestic & heating hot water 30 to 240°F
 - d. Based on Weksler Type EG5H-9
2. Bi-Metal Dial Type:
 - a. Construction: 5" dial, adjust-angle, with lagging brass extension well. Stainless steel case bezel, fittings, and stem. Head assembly sealed against dust, fumes, and moisture with glass window. Accuracy of \pm 1% of thermometer range and be externally adjustable.
 - b. Stem Length:
 - 1) 6" pipe and under: 2-1/2"
 - 2) 8" to 12" pipe: 4-1/2"
 - 3) For storage tanks: 7-1/2"
 - c. Range:
 - 1) Chilled and condenser water 0 to 150°F
 - 2) Domestic & heating hot water: 20 to 240°F
 - d. Based on Weksler Type AF.
3. Thermometer Well: Construction - Brass or ductile iron body, with lagging extension, length to accommodate thermometer stem length. Based on Weksler.

B. Pressure Gauges and Accessories:

1. Pressure Gauges:
 - a. Construction: 4-1/2" dial, high impact polypropylene case, 1/4" bottom connection, 1/2% accuracy in accordance with ANSI B40.1 - 1974 Grade A. Stainless steel rotary with stainless steel pinion gear; stainless steel sector gear; stainless steel link. Stainless steel bourdon tube, 316 stainless steel socket and slotted adjustable pointer.
 - b. Case of black high impact polypropylene suitable for surface or direct mounting and with bottom connection. For outdoor locations, provide glycerin filled gauges.
 - c. Range: Ranges shall be so selected to indicate pressure reading in midpoint of scale selected.

- d. For condenser water, ice water and other open system pumps, provide a compound gauge with dial calibrated to read in. hg. vac. as well as pressure.
- e. Based on Weksler Model AA44-2 and AY44-2.
- 2. Manifold Valves (Trumpet Valve) (Water): - 2, 3 or 4 port - Brass body, spring return, push button brass valves, 1/4" compression connections. Gauge tap at top, calibrated gauge test port with gauge cock. 125 PSIG rated, 20°F to 220°F range. Based on Flow Conditioning Corporation Hydronic Indicator System.
- 3. Piston type snubber: Brass body, threaded connections, suitable for mounting horizontal or vertical. (Required at pump inlet and discharge.) Based on Weksler Type RS-1.
- 4. Filter type snubber: Brass body, threaded connection, micro metallic stainless steel filter. (For all gauges except pump service). Based on Weksler Type BW42.
- 5. Siphon: Iron, straight or right angle rated at 500 PSIG steam. (For steam and high temperature hot water systems). Based on Weksler A03I.
- C. Pressure and Temperature Test Ports:
 - 1. Brass or stainless steel body with threaded cap and gasket, length to extend past insulation.
 - 2. Two self-closing valves with intermediate pocket for added pressure protection. Sized for standard 1/8" probe.
 - 3. Range: 20°F to 230°F.
 - 4. Rating: 250 PSIG water.
 - 5. Based on Peterson Equipment Co., Inc. "Pete's Plug" Model 110XL.

PART 3 - EXECUTION

3.1 GENERAL

- A. Install in accordance with manufacturers written installation instructions.

3.2 INSTALLATION

- A. Thermometers and Accessories:
 - 1. Install and adjust thermometers for optimum visibility.
 - 2. Provide thermometers where indicated on schematic flow diagram or schematic equipment details.
 - 3. Install thermometers in compatible thermometer wells.
- B. Pressure Gauges and Accessories:
 - 1. Install and adjust gauge for optimum visibility.
 - 2. Provide ball valve shut-off for all hydronic gauges.
 - 3. Provide needle valve for all steam gauges.
 - 4. Provide siphon for all steam gauges.
 - 5. Provide a manifold valve to facilitate the use of a single gauge to monitor pressure differential from various points of a single piece of equipment (i.e. pump; strainer suction; pump suction; pump discharge, etc.). Mount valve for optimum visibility and access.

6. In lieu of the trumpet valves the contractor may assemble individual components using ball valves as the isolation valve provided the same functions of the trumpet valve are duplicated.
 7. Provide piston type snubbers for pump service.
 8. Provide filter type snubbers for all other fluid services.
 9. Open shut-off valve only enough to obtain accurate reading. Valve to gauge to be closed at all other times.
- C. Pressure and Temperature Test Ports:
1. Install in upright or vertical position as indicated on schematic flow diagram or schematic equipment details.
 2. Install in tee or welded outlet.
- D. Install miscellaneous control devices such as thermometer wells, tees for flow measuring stations, connections for differential pressure sensors, etc.

END OF SECTION

SECTION 22 05 23
VALVES FOR PLUMBING SYSTEMS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Refer to Division 1 for all requirements pertaining to General Provisions.

1.2 WORK INCLUDED

- A. Automatic Flow Control Valves.
- B. Ball valves.
- C. Check valves.
- D. Combination Automatic Flow Control and Shutoff Valves.
- E. Drain valve.
- F. Lubricated Plug Cock.

1.3 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this Section to the extent referenced. The publications are referenced to in the text by the basic designation only.
 - 1. American National Standards Institute (ANSI).
 - 2. American Society for Testing and Materials (ASTM).

1.4 SUBMITTALS

- A. Submit schedule and cut-sheets indicating service, make and model number, pressure class, end type and usage (i.e., balance, shut-off).
- B. Product data shall be included in the operation for maintenance instruction manuals along with installation, operation and maintenance instructions.
- C. Refer to Division 1 for Submittal requirements.

PART 2 – PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Automatic Flow Control Valves:
 - 1. Flow Design, Inc.
 - 2. Griswold Controls.
- B. Ball Valves:
 - 1. Apollo
 - 2. Viega
 - 3. Milwaukee Valve.
 - 4. Nibco, Inc.
 - 5. Stockham

6. Victaulic Co. of America.
- C. Check Valves:
 1. API International, Inc.
 2. Milwaukee Valve
 3. Mueller Steam Specialty, Co. (Muessco)
 4. Nibco, Inc.
 5. Stockham
 6. Victaulic Co. of America.
 7. Walworth
- D. Combination Automatic Flow Control and Shutoff Valves:
 1. Flow Design, Inc.
 2. Griswold Controls
- E. Drain Valves:
 1. Apollo.
 2. Nibco, Inc.
 3. Watts
- F. Lubricated Plug Cock:
 1. DeZurik
 2. Milliken Valve Company
 3. Rockwell Mfg. Co.
 4. Resun
 5. Walworth

2.2 FABRICATION

- A. Automatic Flow Control Valves:
 1. Potable Water Service:
 - a. Size ½" thru 2-1/2": Brass wye body design, thread or sweat connection, ground joint union, dual temperature and pressure test ports extended to clear required insulation, range 20°F to 230°F rated at 400 psi water. Stainless steel or nickel-plated piston brass orifice and spring, replaceable without removing from installation, factory set to control the flow rate within 5% of the tagged rating over an operating pressure differential of at least 10 times the minimum required for full flow condition. GPM and direction of flow shall be clearly marked on flow control valves. Wide open pressure drop shall not exceed 10 ft. Valves shall be calibrated for the fluid being pumped. Based on Flow Design, Inc. AutoFlow Model YR
- B. Ball Valves:
 1. Potable water service:
 - a. Size 1/4" thru 2". Brass body threaded or sweat connection, stainless steel stem, stainless steel or aluminum bronze conventional ported ball, teflon or silicone bronze seat, steel lever handle, indicator stop, 150 lb. 600 WOG.
 - b. Valves installed in insulated piping to have extended handles to clear insulation. Stem extension shall be made of a non-thermal conducting material with a sleeve to form an insulated vapor seal after the valve is insulated. Based on Nibco T-580-70.

- C. Check Valves:
 - 1. Potable Water Service:
 - a. Horizontal swing check valve:
 - 1) Size 1/4" thru 3". Bronze body thread or sweat connection, "Y" pattern, bronze seat, renewable teflon or bronze swing disc, Class 125. Based on Nibco T-413-B, Y or S-413-B, Y.
 - 2) Size 4" and up. Bronze body, sweat connection, bolted cover, bronze seat, bronze disc holder. Renewable bronze disc, Class 125. Based on Nibco Fig. S-433.
 - b. Vertical lift check valve.
 - 1) Size 3/8" thru 2". Bronze body threaded or sweat connection, renewable teflon disc and seat, copper or stainless steel, spring loaded, stainless steel guide pin Class 125. Based on Nibco S-480 or T-480.
 - 2) Size 2-1/2" thru 10". Iron wafer type body, taped lug connection, renewable bronze disc and seat, stainless steel spring loaded, bronze guide pin, Class 125. Based on Nibco W-910.
 - 3) Size 12" and up. Bronze globe body, flanged connection, renewable bronze disc and seat, stainless steel spring loaded, bronze guide pin, Class 125. Based on Nibco F- 910.
- D. Combination Automatic Flow Control and Shutoff Valves:
 - 1. Water Service:
 - a. Size 1/2" thru 2: Brass wye body thread or sweat connection, union, two-temperature and pressure test port extended to clear require insulation, brass or bronze ball valve with stainless steel ball and stem, non-thermal conductive material type actuator extended to clear required insulation for chilled water applications, steel lever type for heating applications. Range 20°F to 230°F rating 400 psi water. Stainless steel or nickel plated piston brass orifice and spring, replaceable without removing from installation, factory set to control the flow rate within 5% of the tagged rating over an operating pressure differential of at least 10 times the minimum required for full flow condition. GPM and direction of flow shall be clearly marked on flow control valves. Wide open pressure drop shall not exceed 10 ft. Valves shall be calibrated for the fluid being pumped. Based on Flow Design, Inc. AutoFlow Model AC.
- E. Drain valves:
 - 1. Potable water service:
 - a. Size 1/2" and 3/4". Two-piece, adapter loaded, single reduced port type with brass body, iron pipe thread inlet or sweat inlet, 3/4" hose thread outlet, brass cap and chain at outlet, stainless steel stem, stainless steel ball, teflon or silicone bronze seat, steel lever handle, indicator stop, 150 lb. 600 WOG.
 - b. Valves installed in insulated piping to have extended handles to clear insulation. Based on Watts B-6000-CC or B-6001-CC or Nibco T-585-70HC.

PART 3 - EXECUTION

3.1 GENERAL

- A. Provide shut-off valves on the inlet and outlet of each piece of equipment at the take-off of each major branch from a header and at the base of each pipe riser in order to facilitate service.
- B. Provide drain valves at the base of each pipe riser and at each piece of equipment to facilitate service.
- C. Provide locking device on handle of the expansion tank isolation valve to prevent accidental closing.

3.2 INSTALLATION

- A. Automatic Flow Control Valves:
 - 1. Install with taps in upright or vertical position.
 - 2. Tag valve for:
 - a. Type of service.
 - b. Flow in GPM.
 - 3. The contractor shall assume the responsibility to obtain the necessary gauges and thermometers to properly take the differential pressure and temperature readings from the flow control valves.
 - 4. All flows shall be verified.
- B. Ball Valves:
 - 1. Install valves with adequate access to lever actuator.
 - 2. Provide adequate space for actuator handle in the open and closed position and for packing replacement.
- C. Check Valves:
 - 1. Horizontal swing check valves: Install valve with swing disc in the pendent position, cover in upright position.
 - 2. Vertical lift check valve:
 - a. Install valve in vertical position, upward flow.
 - b. Flanged valves will be installed between 125# or 150 ANSI flanges or other flanged valves.
 - c. A spool piece a minimum of 6" face to face will be used to separate a vertical lift check valve and a butterfly valve.
 - d. Inspect the face of the flange and valve for casting/matching burrs. If burrs exist remove by draw filling prior to gasket placement.
- D. Combination Flow Control and Shutoff Valves:
 - 1. Install with taps in upright position in a manner that will allow all the tap to be used as an air vent.
 - 2. Tag valve for:
 - a. Type of service.
 - b. Flow in GPM.
 - 3. Obtain the necessary gauges and thermometers to properly take the differential pressure and temperature readings from the flow control valve.
 - 4. All flows shall be verified.

- E. Drain Valves: Install valves to provide adequate space for hand wheel, access, stem travel, disc replacement cap removal and clearance for easy hose connection without crimping hose.
- F. Lubricated Plug Cock: Install valve with actuator in the upright or horizontal position.

END OF SECTION

SECTION 22 05 76
FACILITY DRAINAGE PIPING CLEANOUTS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Refer to Division 1 for all requirements pertaining to General Provisions.

1.2 WORK INCLUDED

- A. Cleanouts.

1.3 SUBMITTALS

- A. Submit shop drawings in accordance Division 1 for submittal requirements.
- B. Each cleanout submittal must be marked to show what area it will be used.

1.4 JOB CONDITIONS

- A. Provide protection for all cleanouts against damage during construction. The plumbing contractor shall be responsible to replace any damaged cleanouts.

PART 2 – PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. The manufacturers referenced herein are those that the specifications and drawings are based on. Equipment by other manufacturers will be considered provided all requirements and intent of the specifications are met.

2.2 MATERIALS

- A. Cleanouts:
 - 1. Floor Type (FCO):
 - a. Finished Floors - Cast iron adjustable floor level cleanout assembly with round nickel bronze top and plug, with inverted hub and neoprene gasket.
J. R. Smith Fig. 4033-L
Josam # 56010-22
MIFAB #C1100-R
Watts #CO-200-R
 - b. Terrazzo Floors - Cast iron adjustable floor level cleanout assembly with round nickel bronze top and plug, with center lifting device. Top depression to be filled with terrazzo and finished.
J. R. Smith Fig. 4180, Gasket #4193
Josam # 56040-13-1
MIFAB #C1100-UR
Watts #CO-200-LL

2. Above Floor (CO):
 - a. Caulk Ferrule Cleanouts - Cast iron ferrule with countersunk bronze plug.
J. R. Smith Fig. 4420
Josam # 58900
MIFAB #C-1450
Watts #CO-380
3. Wall Type (WCO):
 - a. Wall-Round Cover - Cast iron ferrule with lead seal plug, round stainless-steel cover with center screw.
J. R. Smith Fig. 4402
Josam # 58600-CO
MIFAB #C1450-RD
Watts #CO-380-RD
 - b. Wall-Round Cover - Cast iron ferrule with lead seal plug; chrome plated bronze round frame and cover secured with slotted screws for "face-of-wall".
J. R. Smith Fig. 4432
Josam # 58610
MIFAB #C1300-R
Watts #CO-300-R

PART 3 – EXECUTION

3.1 INSTALLATION

- A. Cleanouts:
 1. Provide cleanouts in all locations shown on the drawings and in all other locations required by The Local Building Code, and as directed by the Local Inspector.
 2. Where special conditions exist, such as the need for a shallow cleanout to meet invert elevations, make changes necessary at no change in contract price and submit drawings or description for approval if requested by the Architect.
 3. Cleanouts shall be the same size as the pipes they serve up to 4 inch, and not less than 4 inch for piping of larger size.
 4. Cleanouts shall be installed not more than 100 feet apart in horizontal drainage piping.
 5. Cleanouts shall be installed in the horizontal piping at each change of direction of the building waste, soil and storm systems greater than 45 degrees.
 6. A cleanout shall be installed at or near the base of each waste, soil or rainwater leader stack.
 7. All work this section shall conform to local building/plumbing code.

END OF SECTION

SECTION 22 05 77
FACILITY PLUMBING DRAINS AND ACCESSORIES

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Refer to Division 1 for all requirements pertaining to General Provisions.

1.2 WORK INCLUDED

- A. Floor Drains.
- B. Floor Sinks
- C. Roof Drains
- D. Trench Drains
- E. Hub Drains.
- F. Backwater Valve
- G. Trap Primers

1.3 SUBMITTALS

- A. Submit shop drawings in accordance with Division 1 Requirements.
- B. Each drain submittal must be marked to show what area it will be used.

1.4 JOB CONDITIONS

- A. Provide protection for all drains and cleanouts against damage during construction. The Plumbing Contractor shall be responsible to replace any damaged drains.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. The manufacturers referenced herein are those that the specifications and drawings are based on. Equipment by other manufacturers will be considered provided all requirements and intent of the specifications are met.

2.2 MATERIALS

- A. Floor Drains:
 - 1. FD-1: Shower/Gym/Tiled areas s - Cast iron body, flashing clamp and adjustable square nickel bronze top and "P" trap with trap primer as required by governing authority.
Zurn #ZN415-5S-P
J. R. Smith Fig. 2010-B
Josam #30000-S
Watts #FD-100-M5-7
MIFAB #F1100-C-S5-1

2. FD-2: Mechanical Room/Janitors closet Floor Drain - Cast iron body, flashing clamp and adjustable round nickel bronze top and "P" trap with trap primer as required by governing authority.
Zurn #ZN415-5S-P
JR Smith Fig. #2010-B
Josam # 30000-S
Watts #FD-100-M5-7
MIFAB #F100-C-S5-1
- B. Floor Sinks:
1. FS-1: 12" x 12" x 8" cast iron body, square slotted medium duty grate, acid resistant porcelain enamel interior and top, complete with aluminum anti-splash interior bottom dome strainer. Coordinate grates and funnels with the Kitchen Consultant.
Zurn #Z-1901
Josam #49340A-LF
Watts #FS-740
MIFAB #FS1730
- C. Roof Drains:
1. RD-1: Insulated Deck - Cast iron body, flashing, clamp and gravel stop, underdeck clamp, sump receiver, extension and low silhouette cast iron dome.
Zurn #ZC100-DP-EA
Josam #21000-22-3
JR Smith #1015-CID-R-C
Watts #RD-300-F-K40-D
MIFAB #R1200-M
 2. RD-2: Emergency Overflow Roof Drain: Insulated deck – cast iron body, flashing, clamp and gravel stop, under deck clamp, sump receiver, extension, and low silhouette cast iron dome. 2" internal water dam.
Zurn #ZC100-DP-EA-89
Josam #26000-22-3
JR Smith #1074-CID-R-C
Watts #RD-300-F-K40-D-W
MIFAB #R1200-M-W2
- D. Trench Drain:
1. TD-1: Pre-Sloped Trench Drain System with 6"(152) wide x 48"(1219) long (standard)
UV stabilized glass-filled polypropylene frame, UV stabilized talc-filled polypropylene channels with integral 4"(102) No Hub bottom outlet(s). System shall be frame-anchored, with (specify) grating to suit DIN Class (specify) load rating. System to include frame connectors, grate lockdowns, and construction covers. Installation to be performed in accordance with manufacturer's instructions and building code. Install with stainless steel slotted cover.
Watts Dead Level: P-PP-VR
Zurn #Z-886-HPP-VP-JC-E1-U4
Wsde: WN900-PSG-UEP-NH4-VR
- E. Hub Drains:
1. HD-1: Cast iron body, flashing clamp, water dam, cast iron dome strainer with vandal-proof screws. Provide with deep seal "P" trap with trap guard.
J. R. Smith Fig. 3960
Josam # 25540
Watts #RD-200-R-LD-DS-L

MIFAB #R1100-RS

F. Backwater Valve:

1. BWV-1: Series coated cast iron backwater valve, offset type, bronze fixed swing-check assembly, bolted gasketed cover, and no-hub connections.

Josam #67400

Watts #BV-200

MIFAB #BV1000

G. Trap Primer:

1. TPV-1: For floor drains. Mechanical trap primer. Install on a 1 1/2" or smaller line. Trap primer valve with a (4) four outlet distribution system. Install per manufacturer's recommendations.

Precision Plumbing Products Oregon #1 Trap primer valve.

PART 3 – EXECUTION

3.1 INSTALLATION

A. Drains:

1. Unless otherwise specified, drains to be complete with strainers, trim, flashing and appurtenances and constructed of cast iron with painted finish.
2. Set all floor drains level and at proper elevations to surrounding floor area to provide smooth and uniform drainage area.
3. Unless noted otherwise, provide a trap for each floor drain of a material to match the pipeline to which it discharges.
4. Provide drains in all locations shown on the Architectural and Plumbing drawings. Drains to be of the types specified herein and sized as shown on the plumbing drawings. Refer to the Architectural drawings for additional installation details.
5. Actual sizes and quantities of all drains shall be determined from the drawings.

END OF SECTION

SECTION 22 07 00
PLUMBING INSULATION

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Refer to Division 1 for all requirements pertaining to General Provisions.

1.2 WORK INCLUDED

- A. Piping Systems Insulation.
- B. Accessories.

1.3 QUALITY ASSURANCE

- A. All products within the conditioned air stream or active plenums shall comply with the NFPA 90A Flame/Smoke rating of 25/50 and comply with UL 181 erosion limitations. Fire hazard ratings shall be as determined by NFPA-255, "Method of Test of Surface Burning Characteristics of Building Materials" - ASTM E84 or UL 723.
- B. All adhesives, cements, finishes, jackets, etc., shall be UL listed or labeled for use as applied to insulation and designed specifically for use in the installation.
- C. All insulation shall be installed in accordance with National Commercial & Industrial Insulation Standards (NCIA).

1.4 SUBMITTALS

- A. Submit schedule indicating type of insulation, thickness, vapor barrier or coating by system and size.
- B. Product data, along with installation operation and maintenance instructions, shall be included in the operation and maintenance manuals.
- C. Submit details of insulated removable covers using the actual equipment dimensions, concrete base sizes and piping arrangements.
- D. Refer to Division 1 for submittal requirements.

1.5 GENERAL REQUIREMENTS

- A. Factory-applied insulation is specified under the applicable equipment Section of these specifications. It is listed here for reference only.
- B. Packages and standard containers of materials shall be delivered unopened to job site and shall have the manufacturer's label attached giving a complete description of the material.
- C. All rain leader piping and roof drain bodies shall be insulated within the building to above grade. Materials are specified elsewhere herein.

1.6 DEFINITIONS

- A. The term "exposed" means exposed to view in finished spaces, in equipment rooms, in fan rooms, in closets, in utility corridors, in tunnels, on roof, in storage rooms, and in other spaces as indicated.
- B. The term "concealed" means concealed from view, and includes all spaces not defined as exposed.
- C. The term "unconditioned" space shall mean all places where the temperature surrounding the pipe has not been conditioned consistent with conditioned spaces, and shall include mechanical equipment rooms, non-active ceiling plenums, and non-accessible chases. This term shall also include conditioned spaces where the humidity levels are allowed to rise above 70% RH.

PART 2 – PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Fiberglass Insulation:
 - 1. Owens-Corning Fiberglas
 - 2. Knauf Fiberglass
 - 3. CertainTeed
 - 4. Johns Manville
- B. Closed Cell Elastomeric Insulation:
 - 1. Armacell LLC
 - 2. Johns Manville
 - 3. Rubatex

2.2 PIPE INSULATION REQUIREMENTS

| | <u>Thickness</u> | <u>Type</u> |
|---------------------------------------|------------------|--------------------|
| A. Condensate Drain (C): All Sizes | 1/2" | Closed Cell Elast. |
| B. Dom. Cold Water (CW): Up to 4" | -- | Not Required |
| 5" through 14" | -- | Not Required |
| C. Dom. Hot Water (HW) (HWR): | | |
| <u>Conditioned Space</u> | | |
| Up to 2" | 1" | Rigid Fiberglass |
| 2-1/2" through 4" | 1" | Rigid Fiberglass |
| 5" through Larger | 1-1/2" | Rigid Fiberglass |
| <u>Unconditioned Space</u> | | |
| Up to 2" | 1" | Rigid Fiberglass |
| 2-1/2" through 4" | 1-1/2" | Rigid Fiberglass |
| 5" through Larger | 2" | Rigid Fiberglass |
| D. Hub Drains Receiving | | |
| Condensate – All Sizes | 1/2" | Closed Cell Elast. |
| Condensate - All Sizes | 1/2" | Closed Cell Elast. |
| E. Storm water Drains | | |
| All sizes | 3/4" | Rigid Fiberglass |

2.3 MATERIALS

- A. Pipe Insulation (to 450F):
1. Rigid Fiberglass: Resin bonded fibrous glass, flame retardant, factory applied all service jacket vapor barrier with self sealing pressure sensitive lap joints, molded to accommodate pipe, maximum vapor permeance of .02 perm/in. and a puncture resistance of 50 units, minimum density 4.0 lb./cf., maximum conductivity per 1" thickness of .23 at 75°F, .29 at 200°F and .43 at 400°F mean temperature. Based on Knauf Pipe Insulation.
 2. Closed Cell Elastomeric (Small Pipe Sizes up to 5 Inches): Flexible, elastomeric, closed cellular, tubular molded to accommodate piping, smooth outer surface suitable for painting with vinyl lacquer type coating, water resistant, nonabsorbent, ozone resistant, minimum density of 4 lb./cf., maximum conductivity per 1" thickness of .27 at 75°F mean temperature. Based on Armacell LLC AP Armaflex and Self-seal Armaflex 2000.
 3. Closed Cell Elastomeric (Large Pipe Sizes, 6" and Larger): Sheet type, flexible, elastomeric, closed cellular, smooth outer surface suitable for painting with vinyl lacquer type coating, water resistant, nonabsorbent, ozone resistant, minimum density of 4 lb./cf., maximum conductivity per 1" thickness of 2.7 at 75°F mean temperature. Based on Armacell LLC Armaflex II.
- B. Accessories:
1. Corner angles shall be minimum 28-gauge, 1 inch by 1 inch aluminum adhered to 2 inches by 2 inch heavy kraft paper.
 2. Glass tape shall be a minimum density of 1.6 ounces per square yard, 4 inch wide with a 10 x 10 thread count per inch of width. Glass cloth shall be untreated.
 3. Staples shall be outward clinching type, Type 304 or 316 stainless steel in accord with ASTM A 167 or Monel® coated.
 4. Wire shall be soft annealed galvanized, or copper, 16 gauge, or nickel copper alloy.
 5. Closed cell elastomeric insulated finish shall be a white water based flexible, acrylic latex enamel equal to WB Armaflex finish.
 6. Insulation Tape: Closed cell elastomeric insulation: 2" wide x 1/8" thick.
 7. Elastomeric Insulation Adhesive: Air drying contact adhesive for securing sheets to flat or curved metal surfaces and joining seams and butt joints of elastomeric insulation. Suitable for temperatures to 180F, dried film not to exceed 25 for flame spread and 50 for smoke development when tested per ASTM E 84-84A method.
 8. Vapor Barrier Mastic: Air drying flexible water-based mastic used for applying a vapor barrier joint with glass cloth at insulation joints. Suitable for temperatures to 180°F, wet and dried film not to exceed 25 for flame spread and 50 for smoke development when tested per ASTM E 84-84A method. Maximum Perm rating of 0.08., Childers Products Company, Inc. CP-35 Chil Therm® WB, Foster Products Corp. Product Data 30-80 Foster Vapor Safe® Coating, Marathon Industries, Inc. 590 LO-PERM, Richard's Paint Manufacturing CO., Inc. VBM-4, Vimasco Corp. 749 Vapor-Blok, or equal.
 9. Acrylic Latex Finish and Sealers:
 - a. Elastomeric Insulations: Air drying flexible water-based finish used for finishing flexible elastomeric insulation. Suitable for temperatures to 180°F, wet and dried film not to exceed 25 for flame spread and 50 for smoke development when tested per ASTM E 84-84A method. Armacell LLC WB Armaflex finish.

PART 3 – EXECUTION

3.1 GENERAL REQUIREMENTS

- A. Install all insulation in strict accordance with the manufacturers written installation instructions.
- B. All insulation work shall be performed by skilled mechanics regularly engaged in the insulation trade.
- C. Properly coordinate the insulation work with the other trades so that installation is performed with a minimum of conflict.
- D. Insulation shall not be applied on any piping system requiring testing until testing is completed and approved by Owner's Representative.
- E. Insulation shall not be applied until all systems are clean, dry, free of dirt, dust or grease.
- F. The finished installation shall present a neat and acceptable appearance which includes but is not limited to: all jackets smooth, all vapor barriers sealed properly, no evidence of "ballooning" of the jackets, or sagging insulation, all valves, dampers, gauges, unions, etc. accessible. The Owner's Representative shall be the final judge of acceptance of workmanship.
- G. All equipment nameplates on hot equipment shall be left uncovered. All equipment nameplates on cold equipment shall have a removable section sized to expose the nameplate. This section shall be clearly marked "NAMEPLATE".
- H. If proper maintenance procedures require access to the insulated equipment removable panels, sections or covers shall be provided to accomplish this. These access devices shall be constructed in a manner to assure easy access and sturdy construction. The contractor shall assume the responsibility to coordinate all equipment requiring insulation to be either factory or field insulated.
- I. Insulation and accessories shall be applied only at suitable application temperature and conditions as recommended by the manufacturer. Do not apply insulation to any surface while it is wet.
- J. Insulation shall be protected from moisture and weather during storage and installation.
- K. Insulation which has sustained moisture damage, torn jackets, or other damage due to improper storage or other reasons shall not be used. If evidence of this is sighted the Owner's representative reserves the right to require the insulating contractor to remove any and/or all insulation until the Owner's Representative is satisfied that there is no longer any inferior insulation installed on this project.
- L. Insulation, fabric and jacketing shall be protected from damage during construction. Damage by the insulator shall be repaired without cost to the Owner. Damage by others shall be reported in writing to the contractor.
- M. The insulation subcontractor is responsible for proper material storage at the work site.
- N. Work performed prior to receipt of approved documents or submittals, later proving to be incorrect or inappropriate, shall be promptly replaced by the contractor without cost to the purchaser.
- O. Insulation shall not be installed until adequate access and clearances at control mechanisms, dampers, sleeves, columns and walls have been provided.
- P. All insulation at handholes, access doors or other openings, and adjacent to flanges and valves shall be neatly finished where exposed to view.
- Q. All materials, accessories and methods of installation and fabrication are subject to the Owner's Representatives inspection and approval during any phase of the work.

- R. The insulation subcontractor shall prevent the accumulation of insulation debris in the buildings and on the premises of the Owner.
- S. The insulation subcontractor shall be responsible for his own safety program at the work site and shall provide instruction on safe practices for his workers assigned to the project. All employees are subject to the work rules at the job site.
- T. The insulation subcontractor shall familiarize himself with the progress and execution of the job and notify the proper parties of interferences and any problems with the proper installation of his materials.

3.2 INSTALLATION

A. Pipe Insulation:

1. General:

- a. All locations where the insulated surface is supported by hangers, the insulation shall be protected by shields or saddles properly skimmed to maintain a smooth outer surface, and proper insulation thickness. Chilled water piping, 3" and over shall have a section of foamglas insulation installed between the pipe and shield. 3 and 4" to be 12" long, 5" and 6" to be 18" long and 8" and over, 24" long. If the possibility exists that the hanger may conduct the temperature of the conveyed medium and thus cause condensation or personal injury due to high temperature, the hanger shall also be insulated. Joints between foamglas and pipe insulation shall be properly sealed.
- b. All devices connected to or in line with the piping system shall be insulated greater than or equal to the connecting piping. This includes but is not limited to valves, air separators, expansion tanks, control valves, control devices, gauge connections, thermometer stems, chemical feed equipment, piping flexible connectors, etc. This is particularly important on ice water and refrigerant lines.
- c. The insulation at threaded unions in steam and hot water piping shall be tapered and terminated with cement and glass lagging cloth and lagging adhesives.
- d. Insulate exterior surfaces of all anchors and guides for chilled water and dual temperature piping systems.
- e. A complete moisture and vapor barrier shall be installed wherever insulation is penetrated by hangers or other projections through insulation and in contact with cold surfaces for which a vapor seal is specified.
- f. Cover fittings, flanges, unions, valves, anchors, and accessories with pre-molded or segmented insulation of the same thickness and material as the adjoining pipe insulation. Where nesting size insulation is used overlap pipe insulation 2 inches or one pipe diameter. Fill voids with insulating cement and trowel smooth. Elbows shall have not less than 3 segments per elbow. Secure insulation with wire or tape until finish is applied. Blanket inserts in lieu of pre-molded or segmented insulation is not allowed. Cover fittings with preformed PVC fitting covers.
- g. Wrap all pressure gauge taps, thermometer wells and all other penetrations through insulation with closed cell insulation tape so as to prevent condensation.
- h. Seal all raw edges of insulation.

- i. For piping supported by hangers outdoors, apply a rain-shield to prevent water entry.
- 2. Rigid Fiberglass:
 - a. Provide PVC fitting covers for all fittings.
 - b. Align all jacket seams.
 - c. Assure all vapor barriers are properly sealed.
 - d. Provide PVC jacket over all exposed insulation in the equipment room.
 - e. All corner angels below 6'-10" shall have padded insulation and be marked with yellow stripes.
- 3. Closed Cell Elastomeric:
 - a. All joints shall be sealed with adhesives.
 - b. Where the thickness is to be obtained by use of two layers of insulation, install with staggered joints.
 - c. Finish:
 - 1) Concealed Indoors: No additional finish.
 - 2) Exposed Indoors: Provide PVC jacket over all insulation.
 - 3) Concealed Indoors: Provide PVC jacket over fittings fabricated from insulation sections or sheet.
 - 4) Outdoors: Provide aluminum pipe jacket.

END OF SECTION

SECTION 22 11 16
DOMESTIC WATER PIPING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Refer to Division 1 for all requirements pertaining to General Provisions.

1.2 WORK INCLUDED

- A. Domestic Water (CW/HW/HWR) Piping.

1.3 DEFINITIONS

- A. The pipe sizes given in this document shall be construed nominal.

1.4 QUALITY ASSURANCE

- A. All material provided under this section shall be standard catalogued products of recognized manufacturers regularly engaged in the production of such products, and shall be of the manufacturer's most recent design that is in regular production.
- B. Each item provided under this section shall meet the requirements for that item as installed and used, in accordance with the following standards:
 - 1. Metallic Piping Systems employing mechanical joints and grooved-end pipe - ASME/ANSI B-31.9
 - 2. All other metallic piping - ASME/ANSI B31.1
- C. Each piping system shall be in accordance with the system design pressures shown in paragraph 2.1 - Materials, this specification section.
- D. All materials provided under this section shall be new, except where the specifications and/or drawings permit the reuse of certain existing materials.

1.5 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this Section to the extent referenced. The publications are referenced in the text by the basic designation only.
- B. The work and materials listed in this Section shall be provided in accordance with the standards and requirements set forth in the applicable portions of the latest editions of the referenced publications.
- C. All cast iron soil pipe and fittings shall be marked with the collective trademark of the Cast Iron Soil Pipe Institute (CISPI) and be listed by NSF International.
 - 1. American National Standards Institute (ANSI) Standards
 - 2. American Petroleum Institute (API) Specification
 - 3. American Society of Mechanical Engineers (ASME) Publications
 - 4. American Society for Testing and Materials (ASTM) Publications
 - 5. American Welding Society (AWS) Publication
 - 6. American Water Works Association (AWWA) Standards
 - 7. Cast Iron Soil Pipe Institute (CISPI) Standards

8. The Manufacturer's Standardization Society of the Valve and Fittings Industry (MSS) Publications
9. National Fire Protection Association (NFPA) Standards
10. National Sanitation Foundation (NSF) Testing Laboratory Standards.
11. Plastic Pipe Institute (PPI) Manual.
12. Plumbing and Drainage Institute.
13. Underwriters Laboratories (UL).

1.6 SUBMITTALS

- A. All submittals shall be made in accordance with Division 1 Requirements.
- B. Submit a list identifying the specific type of material that will be used for each piping system. Include pipe, pipefittings, valves and joints. Include the basic designation of the publication applicable for each type of material and method.
- C. Submit current welder qualifications for all welders proposed for this project. Welding certificates shall be for the company performing the welding at this project as directed in paragraph 3.2 - WELDING, BRAZING, AND SOLDERING.
- D. Submit certified welding inspection reports as directed in paragraph 3.2 - WELDING, BRAZING, AND SOLDERING.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Domestic (Potable) Water (CW/HW/HWR) Piping
System Design Pressure: 150 psig.
 1. Piping, 8" and smaller - Above grade, copper tube, Type "L", hard temper, ASTM B88. Wrought copper or bronze fittings, solder joint, pressure rated, ASTM B16.22-95; or cast bronze fittings, solder joint, pressure rated, ASME B16.18-R94.
 2. Piping, 4" and smaller – Below grade, copper tube, Type "K", hard temper, ASTM B88. Wrought copper or bronze fittings, solder joint, pressure rated, ASTM B16.22-95; or cast bronze fittings, solder joint, pressure rated, ASME B16.18-R94.
 3. Water main pipe and fittings, piping 5" and larger:
 - a. Ductile iron pressure pipe, bell and spigot or mechanical joint, Class 51, 150 psi working pressure, ANSI Standard A21.51. Ductile iron fittings, ANSI Standard A21.11. Include cement mortar lining, ANSI Standard A21.4.
 - b. PVC – ASTM D1784, D1785, SDR 18; fittings PVC-ASTM D2466; joints solvent D2564 or ASTM D1869 ring gasket; NSF Standard 14 & 61.
 4. One-half inch (1/2") trap primer wastewater feed line to floor drains, same as domestic water, Type "L", except soft-drawn copper.
 5. Temperature and pressure relief lines and drain pan lines same as domestic water, Type "L" hard-drawn copper in a return air plenum.
 6. Piping above slab/grade pipe, size 1/2" to 2-1/2" may be Type "L" ASTM B-88 copper tubing.
 7. Pipe Fittings, 4" and smaller - Below ground installation: Wrought Copper, ANSI B16.22.
 8. Pipe fittings, 5" and larger - Below ground installation: Ductile Iron, Class 150, Cement mortar lined, with mechanical joint and/or plain ends as required. The fitting mechanical joints shall match the joints of the pipe and shall be in accordance with ANSI/AWWA C111/A21.11.

9. Solder for factory fabricated fittings: Lead-free per FPC.
10. Brazing for Mechanically formed tee fittings: Brazing may be:
 - a. 5% silver, 6% phosphorus, balance copper, 1190°F melting point. AWS A5.8 number BcuP -3. J.W. Harris Stay-Silv® 5 or equal.
 - b. 15% silver, 5% phosphorus, balance copper, 1190°F melting point. AWS 5.8 number BCuP-5. J.W. Harris Stay-Silv® 15 or equal.
 - c. 6% silver, 6.1% phosphorus, balance copper, 1190°F melting point. QQ-B-654A number BcuP -5. J.W. Harris Dynaflow® 5 or equal
11. Bolts for ductile iron mechanical joints shall be square-headed, carbon steel, ASTM A-307, Grade B. Nuts shall be heavy-duty hex type full nuts; ASTM A-194, Grade 2.

PART 3 – EXECUTION

3.1 INSTALLATION

A. General:

1. Furnish and install piping, fittings and appurtenances required to complete the piping systems shown on the drawings. Elbows shall be long radius type. Tees may not be field fabricated.
2. Run piping to true alignment, generally parallel or perpendicular to building walls, floors and ceilings, and with uniform grades and spacing, so as to present a neat and workmanlike appearance.
3. Care shall be paid to the exact locations of piping with respect to equipment, ducts, conduits, slabs, beams, lighting fixtures, columns, ceiling suspension systems, etc. to provide maximum access to mechanical and electrical equipment in the building. Close coordination and cooperation shall be exercised with other trades in locating the piping in the best interests of the Owner. The drawings and specifications covering other work to be done in the building shall be carefully studied and arrangements made to avoid conflict.
4. Not all necessary pipe offsets are indicated on the drawings because of the small scale. The various runs of piping to be installed shall be studied and adjustments made in exact routings as may be required for proper installation.
5. Conflicts arising during the erection of piping shall be brought to the attention of the Owner's Representative. No improvising or field changes will be permitted without the approval of the Owner's Representative.
6. Use full lengths of pipe wherever possible. Short lengths of pipe with couplings will not be permitted. Cut to exact measurement and install without forcing or spring unless otherwise shown on the drawings or specified.
7. Avoid tool marks and unnecessary pipe threads. Burrs formed when cutting pipe shall be removed by reaming. Before installing any pipe, care shall be taken that the inside is thoroughly cleaned and free of cuttings and foreign matter. Measures shall be taken to preserve this cleanliness after erection.
8. Arrange pipe connections to valves and specialties so that there is clearance for easy removal of the valve or specialty from the line, and also for the removal of the valve bonnet and interior, and the specialty top and bottom and interior, except where otherwise approved by the Owner's Representative.

9. Erect piping in such a manner so as to obtain sufficient flexibility and to prevent excessive stresses in materials and excessive bending movements at joints or connections to equipment. Make allowances throughout for expansion and contraction of piping. Provide each riser and horizontal run of piping with expansion loops, expansion joints, or expansion compensators where indicated and required. Securely anchor and adequately guide pipe as required or where indicated to force expansion to the expansion device without bending, binding, or misalignment of pipe. Branch connections from mains to risers shall be made with ample swing or offset to avoid undue strain on fittings or short pipe lengths. Where indicated, in lieu of expansion loops, expansion joints, or expansion compensators, horizontal runs of pipe shall be anchored at approximately midway of the run to force expansion, evenly divided, toward the mains and risers to provide for expansion and contraction of piping. Flexibility shall be provided by installing one or more turns in the line so that piping will spring enough to allow for expansion without straining.
10. Installed piping shall not interfere with the operations or accessibility of doors or windows and shall not encroach on aisles, passageways and equipment, and shall not interfere with the servicing or maintenance of any equipment. Adjacent pipelines shall be grouped in the same horizontal or vertical plane.
11. Where lines are purposely pitched for drainage, an accurate grade shall be maintained. No lines shall be supported in such a manner as to permit deflection, due to gravity, sufficient to pocket the lines when full of liquid. Grade mains as indicated by arrows on the drawings and in accordance with gradient as indicated in attached Piping Schedule.
12. Piping found to have water hammer or other objectionable vibrations which cannot be eliminated by proper grading or other natural means, shall be braced, trapped or hung with shock absorbing hangers and equipped with mechanical shock absorbers, flexible pipe connections or otherwise silenced using approved means.
13. Use building steel wherever possible for supporting pipe hangers. Main structural steel shall not be drilled, cut or burned for hangers without the approval of the Owner's Representative. Expansion bolts shall be used only upon the approval of the Owner's Representative.
14. Install unions or flanges in piping connections to equipment, regulating valves, and wherever necessary to facilitate the dismantling of piping and/or removal of valves and other items requiring maintenance.
15. Avoid bushings. Reducing fittings shall be used wherever practical.
16. The drawings indicate the size of piping and connections, and if certain sizes are omitted or unclear, obtain additional information before proceeding.
17. The piping drawings have been worked out with a view to the most economical installation, taking into consideration accessibility and appearances, and the Contractor must follow the drawings accurately and if it is found impractical to install the work in accordance with the drawings and specifications, the Contractor shall notify the Owner's Representative before making any changes and get their approval or revised drawings before proceeding with the work. Verify all measurements on the job before cutting pipes or having piping fabricated, and be responsible for the correct location of all pipe connections, also check sizes and standard of outlets on the equipment, including the dimensions and drilling of flanges, etc.

18. Copper tubing and galvanized steel shall not be mixed in any one run of piping.
 19. Change in direction shall be made with fittings, except that bending of steel and copper pipe 4 inches and smaller will be permitted, provided a pipe bender is used and wide sweep bends are formed. The centerline radius of bends shall be not less than 6 diameters of the pipe. Bent pipe showing kinks, wrinkles, flattening, or other malformations is not acceptable.
 20. Threaded joints shall be made with tapered threads in accordance with ANSI B2.1 and made tight with an approved pipe thread joint compound or material, applied to the male threads only. Use compounds sparingly and apply with caution to ensure that compounds do not enter piping systems. When pipe joint is made up a maximum of 3 threads shall be visible.
 21. Joints for plastic pipe shall be made in accordance with PPI Piping Manual.
 22. Connections between ferrous and nonferrous metallic pipe shall be made with dielectric unions or flanges.
 23. Connections between plastic and metallic pipe, between plastic and glass pipe, and between metallic and glass pipe, shall be made with transition fittings manufactured for the specific purpose.
 24. Unions and flanges shall not be concealed in walls, partitions, or above inaccessible ceilings.
- B. Plumbing Systems Additional Requirements:
1. Bends, plugs, or tees in water service lines, except soldered or screwed joints, shall be braced or clamped. The connection between the water service line and the domestic water distribution line shall be anchored by means of tie rods and pipe clamps.
 2. Before connecting the domestic water system to underground supply connections, each supply connection shall be thoroughly flushed of all foreign matter.
 3. Vertical cast iron soil pipe hubs inside buildings shall extend 6 inches above concrete slab-on-grade floors.
 4. Provide test tees with screwed plugs in waste and vent systems to isolate sections of system previously tested from section of system under test. Distance between test tees on vertical lines shall not exceed static height allowable for system pressure limitations. All joints in test tees, including plugs, shall be tested under pressure as specified for system tests.
 5. Joints between cast iron pipe and copper tube shall be made by using a brass-caulking ferrule and properly soldering the copper tube to the ferrule prior to pouring the lead.
 6. Joints between cast iron and vitrified clay piping shall be made using either hot-poured bitumastic compound, or by a preformed elastomeric ring conforming to ASTM C564. The ring shall, after ramming, completely fill the annular space between the cast iron spigot and the vitrified clay hub.
 7. Joints between copper tubing and threaded pipe shall be made by the use of brass adapters or dielectric fittings. The joint between the copper tubing and the fitting shall be soldered, and the connection between the threaded pipe and the fitting shall be a standard pipe size screw joint.
 8. Joints between steel and cast-iron pipe shall be either caulked or threaded, or made with approved adapter fittings.
 9. Install horizontal drainage piping in uniform alignment at uniform slopes that will produce a computed velocity of not less than 2-feet per second when flowing half full, or a minimum of 1/8" per ft. unless noted otherwise.

10. The underground water service pipe and the building sewer shall be not less than 10 feet apart horizontally, and shall be separated by undisturbed, or compacted, earth, unless the following requirements are satisfied:
 - a. The water service pipe and the building sewer may be installed in the same trench, provided written approval is given by the plumbing official and the following conditions are met:
 - 1) The bottom of the water service pipe at all points shall be not less than 12 inches above the top of the sewer line at its highest point.
 - 2) The water service pipe shall be placed on a solid shelf excavated at one side of the common trench.
 - 3) The number of joints in the service pipe shall be kept to a minimum.
 - 4) The materials and joints in the sewer pipe shall be installed in such manner, and shall possess the necessary strength and durability, to prevent the escape of solids, liquids, and gases there from under all known adverse conditions such as corrosion, strains due to temperature changes, settlements, vibration, and superimposed loads.
 - 5) Where the water service line must cross the building sewer line, the bottom of the water service line within 10 feet of the point of crossing shall be at least 12 inches above the top of the sewer line. The sewer line shall be of cast iron, with leaded or mechanical joints, within 10 feet of the point of crossing.
 - 6) Domestic water lines shall be disinfected.
11. Provide access panel for all valves located above non-accessible ceiling. Coordinate with Architectural plans for exact locations.
12. Provide clean-outs at the base of all sanitary waste and vent stacks.
13. When a PVC piping system is employed, the final rough-in piping shall transition to Type "L" copper tubing at penetration of wall construction to the fixture. The copper piping rough-in shall employ the usage of the "Hold Rite" support system to prevent movement of branch tubing. No exceptions.
14. Installation of copper tubing shall be per FPC, ASTM B32-96, and per Copper Development Association and ASTM B828-92-E01.
15. Install plugs or caps on all openings during the construction phase. The temporary plug shall be cap of same material as pipe. Duct tape is unacceptable for use as a plug for the construction phase.
16. All penetrations of piping through walls shall be made insect proof, (i.e., penetrations of waste arms, hot and cold-water piping through walls below sinks, lavatories, water closets, etc.). The escutcheon plate does constitute an "insect proof" closure.
17. Teflon tape shall be used on threaded connections. Expansion loops on hot water system shall be installed per manufacturer's instructions to suit temperature and pipe run.
18. Mechanically formed branch connections, commonly termed extruded outlets, shall be made in a continuous operation consisting of producing a pilot hole, drawing out the tube/pipe surface to form an outlet and facing of the outlet rim (including beveling when required). An integral pipe heating operation may be included, after the cutting of the pilot hole on Schedule 40 wall thickness. The outlet device shall be fully adjustable to insure proper tolerance and complete uniformity of the joint. Materials should have a minimum elongation of 20-25% to be acceptable for forming.

19. The extruded outlet and butt weld connection shall be in accordance with ASME Boiler and Pressure Vessel Code, as listed under ANSI B31 Standards.
- C. Plastic Pipe Systems Additional Requirements:
 1. Joints between plastic pipe and other materials shall be subject to the following requirements:
 - a. Joints between different grades of plastic pipe shall be made by use of an approved adapter fitting.
 - b. Joints between the hub of cast-iron soil pipe and plastic pipe shall be made by use of a mechanical joint of the compression or mechanical sealing type.
 - c. Joints between plastic pipe and cast-iron pipe, steel pipe, glass pipe, copper tube, and other piping materials shall be made by use of an approved adapter fitting.
 2. Plastic pipe, fittings, and solvent cement used for domestic hot and cold-water service shall bear the NSF seal for potable water.
 3. Plastic pipe, fittings, and solvent cement shall not be used in systems where temperature, and operating pressure plus system static head, exceeds materials temperature and pressure limitations.
 4. Plastic vent piping shall not pass-through roofs, firewalls, or fire partitions. Plastic waste and vent piping shall be installed in fire rated pipe chases when passing through floors or approved fire stop sleeve.
- D. Mechanical Joint System Additional Requirements: Install in strict accordance with the manufacturer's written installation instructions.

3.2 WELDING, BRAZING, AND SOLDERING

- A. Operator and Procedure Qualifications: All welding and/or brazing operators and all welding and brazing procedures shall be qualified in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code.
- B. Welding:
 1. All pipe welding performed under this division of the specifications shall be examined in accordance with ANSI B31.1 requirement for each piping system. The pipe weld examination is hereby made a part of the work of this division of the specifications. An independent outside inspection firm, regularly performing this type of examination, shall be hired by the contractor or subcontractor performing the welding as part of the work of their contract. The examination shall be performed by a representative of the Inspection Company (hereafter called the Inspector) who is qualified and certified for each examination method required.
 2. The Inspection Company performing the examination shall certify in writing that all pipe welds performed under this contract conform to the requirements of ANSI B31.1 for each piping system and to all other governing codes.
 3. Before final acceptance of the welded piping, certified test reports shall be submitted for review. The reports shall include the following data: name and location of project, date of test, type of piping system, working pressure and temperature, standard used for testing and applicable test method, number and location of welds tested and names of persons performing test.
 4. Welders and procedures for fire protection system piping qualified in accordance with NFPA No. 13.
- C. Brazing: Silver braze joints in accordance with MSS-SP-73 "Silver Brazing Joints for Wrought and Cast Solder Joint Fittings".
- D. Soldering: Joints in copper tubing shall be made with solder type fittings. Outside

surface of the tube where engaged in the fitting, and inside surface of the fitting in contact with the tube, shall be cleaned with an abrasive material before soldering. Self-cleaning compounds shall not be used. Care shall be taken to prevent annealing of tube and fittings when making connections. The solder joint shall be made with flux and wire form solder, except brazed joints. The flux shall be a mildly corrosive liquid or a petroleum-based paste containing chlorides of zinc and ammonium. Solder shall be applied and drawn through the full fitting length. Excess solder shall be wiped from joint before solder hardens. Joints in copper tube sizes 2-1/2 inches and larger shall be made with heat applied uniformly around the entire circumference of the tube and fittings by a multi-flame torch. Use of oxyacetylene cutting torch in lieu of multi-flame torch is not permitted. Disassemble valves and other accessories that may be damaged by heat before soldering.

3.3 TESTING OF PIPING SYSTEMS:

- A. Each piping system, after erection, shall be subjected to a pressure test. The test requirements shall be as follows:
 - 1. Plumbing related systems shall be tested with water at not less than a 10 foot head. The water shall be kept in the systems for a period of not less than 15 minutes prior to start of visual examination. In lieu of water test, the systems may be tested with air at a uniform pressure of 5 psig, with no loss in pressure for a period of not less than 15 minutes.
 - 2. Domestic Water Distribution Systems shall be tested with water at the system working pressure, but not less than 100 psig. Joints will be visually examined for leaks.
 - 3. Domestic Water Service System shall be tested with water at 150 psig. Joints will be visually examined for leaks.
 - 4. Leaks, if any, shall be located, repaired, and retested in accordance with the test method specified for the system in which the leaks are located.
- B. Prior to testing a system, the Contractor shall provide the proper Building Official and the Owner's Representative with not less than 24 hours notice of the proposed test. The Contractor shall obtain approval of the test results. Where written approval is required, the Contractor shall obtain such written approval, and submit a copy of the approval.
- C. Work requiring testing shall not be covered, or otherwise concealed, until testing is completed, and approval is granted.
- D. Work, or portions of work, that is altered in any way after testing and approval shall be retested, witnessed, and approval obtained.
- E. Systems requiring hydrostatic tests shall be protected from damage caused by freezing. After tests are completed drain all sections of pipe, including traps, or fill undrained sections and traps with antifreeze solution. Vent all high points to release vacuum and ensure complete drainage of closed systems and blow out piping with compressed air to remove trapped water.
- F. Duration of tests, unless specified otherwise, shall be the time required to examine each joint in the system being tested.
- G. Systems requiring hydrostatic testing under pressure shall be vented at high points to ensure that all piping is completely filled with the testing medium.
- H. Disconnect pressure boosting apparatus, or vacuum pumps, during the test time span specified for systems employing the pressure loss/time span test method.

- I. During tests, isolate system components that have test pressures less than pressures specified for system tests.
- J. Use clean soapy water applied to exterior of joints to locate leaks in systems using compressed air, dry carbon dioxide, or nitrogen, under positive pressure as a test medium.

3.4 CLEANING OF PIPING SYSTEMS

- A. Plumbing piping systems shall be thoroughly cleaned as described in Section 22 11 17 - Disinfection of Domestic Water Lines. The chlorination and disinfections process shall be witnessed by a representative of the owner and provide a written Certification, as such.

END OF SECTION

SECTION 22 11 17
DISINFECTION OF DOMESTIC WATER LINES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Refer to Division 1 for all requirements pertaining to General Provisions.

1.2 WORK INCLUDED

- A. Provide personnel, equipment and supplies, disinfect domestic hot and cold-water systems, and flush out systems at completion of treatment.

1.3 DEFINITIONS

- A. Disinfectant Residual means the quantity of disinfectant in treated water.
- B. pH Factor means the measure of alkalinity and acidity in water.
- C. ppm means parts per million.

1.4 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this Section to the extent referenced.
 - 1. American Waterworks Association (AWWA) Standards.
 - 2. Standard Methods for the Examination of Water & Wastewater (14th edition).

1.5 QUALITY ASSURANCE

- A. Water Treatment Contractor: At least 5 years experience performing work specified herein.
- B. Bacteriological Laboratory: State certification.

1.6 SUBMITTALS

- A. General: Submit product literature for approval in accordance with Division 1.
- B. Water Treatment Contractor's evidence of experience: Submit three (3) copies.
- C. Bacteriological Laboratory's evidence of certification: Submit three (3) copies.
- D. Test Reports: Submit four (4) copies as follows:
 - 1. Disinfection Report, include:
 - a. Date issued.
 - b. Project name and location.
 - c. Treatment Contractor's name, address, and phone number.
 - d. Type and form of Disinfectant used.
 - e. Time and date of Disinfectant injection start.
 - f. Time and date of Disinfectant injection completion.
 - g. Test locations.
 - h. Initial and 24-hour Disinfectant Residuals in ppm for each outlet tested.

- i. Time and date of flushing start.
 - j. Time and date of flushing completion.
 - k. Disinfectant Residual after flushing in ppm for each outlet tested.
2. Bacteriological Report. Include:
- a. Date issued.
 - b. Project name and location.
 - c. Laboratory's name, certification number, address, and phone number.
 - d. Time and date of water sample collection.
 - e. Name of person collecting samples.
 - f. Test locations.
 - g. Time and date of laboratory test start.
 - h. Coliform bacteria test results for each outlet tested.
 - i. Certification that water conforms or fails to conform to bacterial standards or fails to conform to bacterial standards of Federal Safe Drinking Water Act.
 - j. Bacteriologist's signature.

1.7 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Protect against damage and contamination.
- B. Maintain caution labels on hazardous materials.
- C. Maintain storage room dry and with temperatures as uniform as possible between 60°F and 80°F.
- D. Do not store Caustic Soda directly on floor colder than 55°F.

1.8 PROTECTION

- A. Provide necessary signs, barricades, and notices to prevent any person from accidentally consuming water or disturbing system being treated.

PART 2 – PRODUCTS

2.1 MATERIALS AND EQUIPMENT

- A. Materials and equipment shall conform to the respective publications and other requirements specified herein.
- B. Disinfectant: Free chlorine; liquid, powder, tablet, or gas.
- C. Alkali: Caustic Soda or Soda Ash.
- D. Acid: Hydrochloric (Muriatic) type.

PART 3 – EXECUTION

3.1 INSPECTION

- A. Prior to starting work verify that domestic water system is completed and cleaned.
- B. Notify Contractor about defects requiring correction.
- C. Do not start work until conditions are satisfactory.

3.2 PREPARATION OF WATER FOR TREATMENT

- A. Verify pH factor of water to be treated.
- B. If pH factor is less than 7.2, introduce sufficient Alkali during Disinfectant injection.
- C. If pH factor is greater than 7.6, introduce sufficient Acid during Disinfectant injection.

3.3 SYSTEM TREATMENT

- A. Injection Disinfectant throughout system to obtain 50 to 80 ppm residual.
- B. Starting at outlet closest to water source, bleed water from each outlet until water produces odor of Disinfectant. Repeat process at each outlet throughout system. If odorless Disinfectant is used testing is required to determine if Disinfectant is fully dispersed throughout system.
- C. Test for Disinfectant Residual at each of the following locations:
 - 1. Ends of piping runs.
 - 2. Remote outlets.
 - 3. At least 15% of outlets on each floor where directed by Architect, but in no case less than 2 outlets.
- D. Maintain Disinfectant in system for 24 hours.
- E. If Disinfectant Residual is less than 25 ppm, repeat system treatment.

3.4 FLUSHING

- A. Remove Disinfectant from system; permit no more than residual rate of incoming water or 1.0 ppm, whichever is greater.

3.5 BACTERIOLOGICAL TEST

- A. Instruct Bacteriological Laboratory to take water samples no sooner than 24 hours after flushing system.
- B. Take water samples at each of the following locations:
 - 1. Where water enters system.
 - 2. Ends of piping runs.
 - 3. Remote outlets.
 - 4. At least 10% of outlets on each floor other than those used for testing Disinfectant Residual, where directed by Architect, but in no case less than two (2) outlets.
- C. Analyze water samples in accordance with AWWA Standard Methods for the Examination of Water & Wastewater, 14th edition.
- D. If bacteriological test proves water quality to be unacceptable, repeat system treatment until water quality is acceptable.

END OF SECTION

SECTION 22 13 16
SANITARY DRAIN, WASTE AND VENT PIPING

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Refer to Division 1 for all requirements pertaining to General Provisions.

1.2 WORK INCLUDED

- A. Sanitary Drain, Waste and Vent (DWV).

1.3 DEFINITIONS

- A. Pipe sizes given in this document are nominal.

1.4 QUALITY ASSURANCE

- A. All material provided under this section shall be standard catalogued products of recognized manufacturers regularly engaged in the production of such products and shall be of the manufacturer's most recent design that is in regular production.
- B. Each item provided under this section shall meet the requirements for that item as installed and used.
- C. Each piping system shall be in accordance with the system design pressures shown in paragraph 2.1 - Materials, this specification section.
- D. All materials provided under this section shall be new, except where the specifications and/or drawings permit the reuse of certain existing materials.

1.5 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this Section to the extent referenced. The publications are referenced in the text by the basic designation only.
- B. The work and materials listed in this Section shall be provided in accordance with the standards and requirements set forth in the applicable portions of the latest editions of the referenced publications.
- C. All cast iron soil pipe and fittings shall be marked with the collective trademark of the Cast Iron Soil Pipe Institute (CISPI) and be listed by NSF International.
 - 1. American National Standards Institute (ANSI) Standards
 - 2. American Petroleum Institute (API) Specification
 - 3. American Society of Mechanical Engineers (ASME) Publications
 - 4. American Society for Testing and Materials (ASTM) Publications
 - 5. American Welding Society (AWS) Publication
 - 6. American Water Works Association (AWWA) Standards
 - 7. Cast Iron Soil Pipe Institute (CISPI) Standards
 - 8. The Manufacturer's Standardization Society of the Valve and Fittings Industry (MSS) Publications
 - 9. National Fire Protection Association (NFPA) Standards

10. National Sanitation Foundation (NSF) Testing Laboratory Standards.
11. Plastic Pipe Institute (PPI) Manual.
12. Underwriters Laboratories (UL)

1.6 SUBMITTALS

- A. All submittals shall be made in accordance with Division 1 requirements.
- B. Submit a list identifying the specific type of material that will be used for each piping system. Include pipe, fittings, valves, hangers and supports. Include the designation of the publication applicable for each type of material and method.
- C. Submit current welder qualifications for all welders proposed for this project. Welding certificates shall be for the company performing the welding at this project as directed in paragraph 3.2 - WELDING, BRAZING, AND SOLDERING.
- D. Submit certified welding inspection reports as directed in paragraph 3.2 - WELDING, BRAZING, AND SOLDERING.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Sanitary Drain, Waste and Vent (DWV) Piping:
 1. Underground sanitary piping:
 - a. No-hub cast iron pipe and fittings, CISPI Standard 301, ASTM A-888-98el.
 - b. No-hub couplings, CISPE Standard 310-97.
 - c. Charlotte Seal Gaskets, ASTM C-564-97, CISPI-HSN.
 - d. Warco-Quik-Tite Gaskets, ASTM C-564-94, CISPI-HSN.
 - e. Schedule 40, PVC-DWV drainage pattern, conforming to the following standards:
 - 1) ASTM D-1784 – Rigid PVC Vinyl Components.
 - 2) ASTM D-1785 – PVC Plastic Pipe, Schedule 40.
 - 3) ASTM D-2665 – PVC Drain, Waste and Vent Pipe and Fittings.
 - 4) ASTM D-2564 – Solvent Cements for PVC Pipe and Fittings.
 - 5) NSF Standard 14 – Plastic Piping Components and Related Materials.
 - f. Pipe Size 15” – PVC pipe and fittings, ASTM D-3034 or ASTM F-679, SDR 35 gasket.
 - g. Pipe Size 18”, 21”, 24” and 27” – PVC pipe and fittings, ASTM F-679, SDR 35 gasket.
 - h. PP Schedule 40 polypropylene, ASTM D635 and ASTM F1412, drainage pattern, mechanical joint stainless-steel components, ASTM B117. Polypropylene shall be used where indicated on the drawings and as specified herein.
 2. Above-ground sanitary and vent piping:
 - a. No-hub cast iron pipe and fittings, CISPI Standard 301, ASTM A-888-98el.
 - b. No-hub couplings, CISPI Standard 310.
 - c. Charlotte Seal Gaskets, ASTM C-564, CISPI-HSN.
 - d. Warco-Quik-Tite Gaskets, ASTM C-564-97, CISPI-HSN.
 - e. 2” and smaller Type DWV hard-drawn copper tubing, ASTM B-306 with copper drainage pattern and (lead-free) solder 95-5 Tin-antimony.
 - f. Schedule 40, PVC-DWV drainage pattern, conforming to the following standards:

- 1) ASTM D-1784 – Rigid PVC Vinyl Components.
- 2) ASTM D-1785 – PVC Plastic Pipe, Schedule 40.
- 3) ASTM D-2665 – PVC Drain, Waste and Vent Pipe and Fittings.
- 4) ASTM D-2564 – Solvent Cements for PVC Pipe and Fittings.
- 5) NSF Standard 14 – Plastic Piping Components and Related Materials.
3. ½” to 1” : Same as domestic water, Type “L” hard-drawn, or Schedule 40 PVC pipe and solvent joint fittings.
4. 1-1/4” to 2” copper drainage tube, DWV Kitchen (Kitchen sinks and equipment waste).
5. Soda conduits shall be long sweep PVC conduit ells (R=24 inches) with solvent joints.
6. Elevator sump pump discharge pipe, inside pit shall be Schedule 40 galvanized steel A53/A106 with black, cast iron drainage fittings with threaded joints. Discharge piping beyond elevator pit wall, below slab, to be similar to sanitary waste, Schedule 40 PVC-DWV.
7. PVC Foam core DWV pipe, ASTM F891, is not and shall not be approved under any circumstances nor installed on this project.

PART 3 – EXECUTION

3.1 INSTALLATION

A. General:

1. Furnish and install piping, fittings and appurtenances required to complete the piping systems shown on the drawings. Elbows shall be long radius type. Tees may not be field fabricated.
2. Run piping to true alignment, generally parallel or perpendicular to building walls, floors and ceilings, and with uniform grades and spacing, so as to present a neat and workmanlike appearance.
3. Care shall be paid to the exact locations of piping with respect to equipment, ducts, conduits, slabs, beams, lighting fixtures, columns, ceiling suspension systems, etc. to provide maximum access to mechanical and electrical equipment in the building. Close coordination and cooperation shall be exercised with other trades in locating the piping in the best interests of the Owner. The drawings and specifications covering other work to be done in the building shall be carefully studied and arrangements made to avoid conflict.
4. Not all necessary pipe offsets are indicated on the drawings because of the small scale. The various runs of piping to be installed shall be studied and adjustments made in exact routings as may be required for proper installation.
5. Conflicts arising during the erection of piping shall be brought to the attention of the Owner's Representative. No improvising or field changes will be permitted without the approval of the Owner's Representative.
6. Use full lengths of pipe wherever possible. Short lengths of pipe with couplings will not be permitted. Cut to exact measurement and install without forcing or spring unless otherwise shown on the drawings or specified.
7. Avoid tool marks and unnecessary pipe threads. Burrs formed when cutting pipe shall be removed by reaming. Before installing any pipe, care shall be taken that the inside is thoroughly cleaned and free of cuttings and foreign matter. Measures shall be taken to preserve this cleanliness after erection.

8. Arrange pipe connections to valves and specialties so that there is clearance for easy removal of the valve or specialty from the line, and also for the removal of the valve bonnet and interior, and the specialty top and bottom and interior, except where otherwise approved by the Owner's Representative.
9. Erect piping in such a manner so as to obtain sufficient flexibility and to prevent excessive stresses in materials and excessive bending movements at joints or connections to equipment. Make allowances throughout for expansion and contraction of piping. Provide each riser and horizontal run of piping with expansion loops, expansion joints, or expansion compensators where indicated and required. Securely anchor and adequately guide pipe as required or where indicated to force expansion to the expansion device without bending, binding, or misalignment of pipe. Branch connections from mains to risers shall be made with ample swing or offset to avoid undue strain on fittings or short pipe lengths. Where indicated, in lieu of expansion loops, expansion joints, or expansion compensators, horizontal runs of pipe shall be anchored at approximately midway of the run to force expansion, evenly divided, toward the mains and risers to provide for expansion and contraction of piping. Flexibility shall be provided by installing one or more turns in the line so that piping will spring enough to allow for expansion without straining.
10. Installed piping shall not interfere with the operations or accessibility of doors or windows and shall not encroach on aisles, passageways and equipment, and shall not interfere with the servicing or maintenance of any equipment. Adjacent pipelines shall be grouped in the same horizontal or vertical plane.
11. Where lines are purposely pitched for drainage, an accurate grade shall be maintained. No lines shall be supported in such a manner as to permit deflection, due to gravity, sufficient to pocket the lines when full of liquid. Grade mains as indicated by arrows on the drawings and in accordance with gradient as indicated in attached Piping Schedule.
12. Piping found to have water hammer or other objectionable vibrations which cannot be eliminated by proper grading or other natural means, shall be braced, trapped or hung with shock absorbing hangers.
13. Use building steel wherever possible for supporting pipe hangers. Main structural steel shall not be drilled, cut or burned for hangers without the approval of the Owner's Representative. Expansion bolts shall be used only upon the approval of the Owner's Representative.
14. Install unions or flanges in piping connections to equipment, regulating valves, and wherever necessary to facilitate the dismantling of piping and/or removal of valves and other items requiring maintenance.
15. Avoid bushings. Reducing fittings shall be used wherever practical.
16. The drawings indicate the size of piping and connections, and if certain sizes are omitted or unclear, obtain additional information before proceeding.
17. The piping drawings have been worked out with a view to the most economical installation, taking into consideration accessibility and appearances, and the Contractor must follow the drawings accurately and if it is found impractical to install the work in accordance with the drawings and specifications, the Contractor shall notify the Owner's Representative before making any changes and get their approval or revised drawings before proceeding with the work. Verify all measurements on the job before cutting pipes or having piping fabricated, and be responsible for the correct location of all pipe connections, also check sizes and standard of outlets on the equipment, including the dimensions and drilling of

flanges, etc.

18. Copper tubing and galvanized steel shall not be mixed in any one run of piping.
 19. Change in direction shall be made with fittings, except that bending of steel and copper pipe 4 inches and smaller will be permitted, provided a pipe bender is used and wide sweep bends are formed. The center-line radius of bends shall be not less than 6 diameters of the pipe. Bent pipe showing kinks, wrinkles, flattening, or other malformations is not acceptable.
 20. Threaded joints shall be made with tapered threads in accordance with ANSI B2.1 and made tight with an approved pipe thread joint compound or material, applied to the male threads only. Use compounds sparingly and apply with caution to ensure that compounds do not enter piping systems. When pipe joint is made up a maximum of 3 threads shall be visible.
 21. Joints for plastic pipe shall be made in accordance with PPI Piping Manual.
 22. Connections between ferrous and nonferrous metallic pipe shall be made with dielectric unions or flanges.
 23. Connections between plastic and metallic pipe, between plastic and glass pipe, and between metallic and glass pipe, shall be made with transition fittings manufactured for the specific purpose.
 24. Unions and flanges shall not be concealed in walls, partitions, or above inaccessible ceilings.
- B. Plumbing Systems Additional Requirements:
1. Bends, plugs, or tees in water service lines, except soldered or screwed joints, shall be braced or clamped. The connection between the water service line and the domestic water distribution line shall be anchored by means of tie rods and pipe clamps.
 2. Before connecting the domestic water system to underground supply connections, each supply connection shall be thoroughly flushed of all foreign matter.
 3. Vertical cast iron soil pipe hubs inside buildings shall extend 6 inches above concrete slab-on-grade floors.
 4. Provide test tees with screwed plugs in waste and vent systems to isolate sections of system previously tested from section of system under test. Distance between test tees on vertical lines shall not exceed static height allowable for system pressure limitations. All joints in test tees, including plugs, shall be tested under pressure as specified for system tests.
 5. Joints between cast iron pipe and copper tube shall be made by using a brass-caulking ferrule and properly soldering the copper tube to the ferrule prior to pouring the lead.
 6. Joints between cast iron and vitrified clay piping shall be made using either hot poured bitumastic compound, or by a preformed elastomeric ring conforming to ASTM C564. The ring shall, after ramming, completely fill the annular space between the cast iron spigot and the vitrified clay hub.
 7. Joints between copper tubing and threaded pipe shall be made by the use of brass adapters or dielectric fittings. The joint between the copper tubing and the fitting shall be soldered, and the connection between the threaded pipe and the fitting shall be a standard pipe size screw joint.
 8. Joints between steel and cast-iron pipe shall be either caulked or threaded, or made with approved adapter fittings.
 9. Install horizontal drainage piping in uniform alignment at uniform slopes that will produce a computed velocity of not less than 2 feet per second when flowing half full, or a minimum of 1/8" per ft. unless noted otherwise.

10. The underground water service pipe and the building sewer shall be not less than 10 feet apart horizontally, and shall be separated by undisturbed, or compacted, earth, unless the following requirements are satisfied:
 - a. The water service pipe and the building sewer may be installed in the same trench, provided written approval is given by the plumbing official and the following conditions are met:
 - 1) The bottom of the water service pipe at all points shall be not less than 12 inches above the top of the sewer line at its highest point.
 - 2) The water service pipe shall be placed on a solid shelf excavated at one side of the common trench.
 - 3) The number of joints in the service pipe shall be kept to a minimum.
 - 4) The materials and joints in the sewer pipe shall be installed in such manner, and shall possess the necessary strength and durability, to prevent the escape of solids, liquids, and gases there from under all known adverse conditions such as corrosion, strains due to temperature changes, settlements, vibration, and superimposed loads.
 - 5) Where the water service line must cross the building sewer line, the bottom of the water service line within 10 feet of the point of crossing shall be at least 12 inches above the top of the sewer line. The sewer line shall be of cast iron, with leaded or mechanical joints, within 10 feet of the point of crossing.
 11. Provide access panel for all valves located above non-accessible ceiling. Coordinate with Architectural plans for exact locations.
 12. Provide clean-outs at the base of all sanitary waste and vent stacks.
 13. Installation of copper tubing shall be per FPC, ASTM B32-96, and per Copper Development Association and ASTM B828-92-E01.
 14. Install plugs or caps on all openings during the construction phase. The temporary plug shall be cap of same material as pipe. Duct tape is unacceptable for use as a plug for the construction phase.
 15. All penetrations of piping through walls shall be made insect proof, (i.e., penetrations of waste arms, hot and cold-water piping through walls below sinks, lavatories, water closets, etc.). The escutcheon plate does constitute an "insect proof" closure.
 16. Mechanically formed branch connections, commonly termed extruded outlets, shall be made in a continuous operation consisting of producing a pilot hole, drawing out the tube/pipe surface to form an outlet and facing of the outlet rim (including beveling when required). An integral pipe heating operation may be included, after the cutting of the pilot hole on Schedule 40 wall thickness. The outlet device shall be fully adjustable to insure proper tolerance and complete uniformity of the joint. Materials should have a minimum elongation of 20-25% to be acceptable for forming.
 17. The extruded outlet and butt weld connection shall be in accordance with ASME Boiler and Pressure Vessel Code, as listed under ANSI B31 Standards.
- C. Plastic Pipe Systems Additional Requirements:
1. Joints between plastic pipe and other materials shall be subject to the following requirements:
 - a. Joints between different grades of plastic pipe shall be made by use of an approved adapter fitting.
 - b. Joints between the hub of cast iron soil pipe and plastic pipe shall be made by use of a mechanical joint of the compression or mechanical sealing type.

- c. Joints between plastic pipe and cast-iron pipe, steel pipe, glass pipe, copper tube, and other piping materials shall be made by use of an approved adapter fitting.
2. Plastic pipe, fittings, and solvent cement used for domestic hot and cold-water service shall bear the NSF seal for potable water.
3. Plastic pipe, fittings, and solvent cement shall not be used in systems where temperature, and operating pressure plus system static head, exceeds materials temperature and pressure limitations.
4. Plastic vent piping shall not pass-through roofs, firewalls, or fire partitions. Plastic waste and vent piping shall be installed in fire rated pipe chases when passing through floors or approved fire stop sleeve.
5. Plastic piping materials shall not be installed in air plenums, air chambers, or airshafts.

3.2 WELDING, BRAZING, AND SOLDERING

- A. Operator and Procedure Qualifications: All welding and/or brazing operators and all welding and brazing procedures shall be qualified in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code.
- B. Welding:
 1. All pipe welding performed under this division of the specifications shall be examined in accordance with ANSI B31.1 requirement for each piping system. The pipe weld examination is hereby made a part of the work of this division of the specifications. An independent outside inspection firm, regularly performing this type of examination, shall be hired by the contractor or subcontractor performing the welding as part of the work of their contract. The examination shall be performed by a representative of the Inspection Company (hereafter called the Inspector) who is qualified and certified for each examination method required.
 2. The Inspection Company performing the examination shall certify in writing that all pipe welds performed under this contract conform to the requirements of ANSI B31.1 for each piping system and to all other governing codes.
 3. Before final acceptance of the welded piping, certified test reports shall be submitted for review. The reports shall include the following data: name and location of project, date of test, type of piping system, working pressure and temperature, standard used for testing and applicable test method, number and location of welds tested and names of persons performing test.
 4. Welders and procedures for fire protection system piping qualified in accordance with NFPA No. 13.
- C. Brazing: Silver braze joints in accordance with MSS-SP-73 "Silver Brazing Joints for Wrought and Cast Solder Joint Fittings".
- D. Soldering: Joints in copper tubing shall be made with solder type fittings. Outside surface of the tube where engaged in the fitting, and inside surface of the fitting in contact with the tube, shall be cleaned with an abrasive material before soldering. Self-cleaning compounds shall not be used. Care shall be taken to prevent annealing of tube and fittings when making connections. The solder joint shall be made with flux and wire form solder, except brazed joints. The flux shall be a mildly corrosive liquid or a petroleum-based paste containing chlorides of zinc and ammonium. Solder shall be applied and drawn through the full fitting length. Excess solder shall be wiped from joint before solder hardens. Joints in copper tube sizes 2-1/2 inches and larger shall be made with heat applied uniformly around the entire circumference of the tube and

fittings by a multi-flame torch. Use of oxyacetylene cutting torch in lieu of multi-flame torch is not permitted. Disassemble valves and other accessories that may be damaged by heat before soldering.

3.3 TESTING OF PIPING SYSTEMS:

- A. Each piping system, after erection, shall be subjected to a pressure test. The test requirements shall be as follows:
 1. General: Furnish everything required for the tests. Notify Architect/Engineer at least 48 hours before any testing is performed. Independent Agent/Owner shall verify pressure test and sign off. Report to be furnished to Architect/Engineer. Testing shall be performed at the completion of each phase of the project.
 2. Plumbing related systems shall be tested with water at not less than a 10-foot head. The water shall be kept in the systems for a period of not less than 15 minutes prior to start of visual examination. In lieu of water test, the systems may be tested with air at a uniform pressure of 5 psig, with no loss in pressure for a period of not less than 15 minutes.
 3. The building sewer shall be tested by insertion of a test plug at the point of connection with the public sewer and filled with water under a head of not less than 10 feet, with no drop in water level for a period of not less than 15 minutes.
 4. Domestic Water Distribution Systems shall be tested with water at the system working pressure, but not less than 100 psig and not for not less than 4 continuous hours. Joints will be visually examined for leaks.
 5. Domestic Water Distribution Systems utilizing Viega Pro-Press fittings with SC Feature Contour Design shall be initially tested at a minimum of ½ psig but not more than 85 psig. Joints shall be visually examined for leaks.
 6. Domestic Water Service System shall be tested with water at 150 psig. Joints will be visually examined for leaks.
 7. Leaks, if any, shall be located, repaired, and retested in accordance with the test method specified for the system in which the leaks are located.
- B. Prior to testing a system, the Contractor shall provide the proper Building Official and the Owner's Representative with not less than 72 hours notice of the proposed test. The Contractor shall obtain approval of the test results. Where written approval is required, the Contractor shall obtain such written approval, and submit a copy of the approval.
- C. Work requiring testing shall not be covered, or otherwise concealed, until testing is completed, and approval is granted.
- D. Work, or portions of work, that is altered in any way after testing and approval shall be retested, witnessed, and approval obtained.
- E. Systems requiring hydrostatic tests shall be protected from damage caused by freezing. After tests are completed drain all sections of pipe, including traps, or fill undrained sections and traps with antifreeze solution. Vent all high points to release vacuum and ensure complete drainage of closed systems and blow out piping with compressed air to remove trapped water.
- F. Duration of tests, unless specified otherwise, shall be the time required to examine each joint in the system being tested.
- G. Systems requiring hydrostatic testing under pressure shall be vented at high points to ensure that all piping is completely filled with the testing medium.
- H. Disconnect pressure boosting apparatus, or vacuum pumps, during the test time span specified for systems employing the pressure loss/time span test method.

- I. During tests, isolate system components that have test pressures less than pressures specified for system tests.
- J. Use clean soapy water applied to exterior of joints to locate leaks in systems using compressed air, dry carbon dioxide, or nitrogen, under positive pressure as a test medium.

END OF SECTION

SECTION 22 14 13
FACILITY STORM DRAINAGE PIPING

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Refer to Section 22 05 00 for requirements pertaining to Common Work Results for Plumbing Systems.

1.2 WORK INCLUDED

- A. Storm Water (ST) Piping.

1.3 DEFINITIONS

- A. The pipe sizes given in this document are nominal.

1.4 QUALITY ASSURANCE

- A. All material provided under this section shall be standard catalogued products of recognized manufacturers regularly engaged in the production of such products and shall be of the manufacturer's most recent design that is in regular production.
- B. Each item provided under this section shall meet the requirements for that item as installed and used.
- C. Each piping system shall be in accordance with the system design pressures shown in paragraph 2.1 - Materials, this specification section.
- D. All materials provided under this section shall be new, except where the specifications and/or drawings permit the reuse of certain existing materials.

1.5 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this Section to the extent referenced. The publications are referenced in the text by the basic designation only.
- B. The work and materials listed in this Section shall be provided in accordance with the standards and requirements set forth in the applicable portions of the latest editions of the referenced publications.
- C. All cast iron soil pipe and fittings shall be marked with the collective trademark of the Cast Iron Soil Pipe Institute (CISPI) and be listed by NSF International.
 - 1. American National Standards Institute (ANSI) Standards
 - 2. American Petroleum Institute (API) Specification
 - 3. American Society of Mechanical Engineers (ASME) Publications
 - 4. American Society for Testing and Materials (ASTM) Publications
 - 5. American Welding Society (AWS) Publication
 - 6. American Water Works Association (AWWA) Standards
 - 7. Cast Iron Soil Pipe Institute (CISPI) Standards
 - 8. The Manufacturer's Standardization Society of the Valve and Fittings Industry (MSS) Publications

9. National Fire Protection Association (NFPA) Standards
10. National Sanitation Foundation (NSF) Testing Laboratory Standards.
11. Plastic Pipe Institute (PPI) Manual.
12. Plumbing and drainage institute.
13. Underwriters Laboratories (UL)

1.6 SUBMITTALS

- A. All submittals shall be made in accordance with Section 22 05 00 requirements.
- B. Submit a list identifying the specific type of material that will be used for each piping system. Include pipe, pipefittings, valves and joints. Include the basic designation of the publication applicable for each type of material and method.
- C. Submit current welder qualifications for all welders proposed for this project. Welding certificates shall be for the company performing the welding at this project as directed in paragraph 3.2 - WELDING, BRAZING, AND SOLDERING.
- D. Submit certified welding inspection reports as directed in paragraph 3.2 -WELDING, BRAZING, AND SOLDERING.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Storm Water (ST) Piping
 1. Underground piping:
 - a. No-hub cast iron pipe and fittings, CISPI Standard 301, ASTM A-888-98el.
 - b. No-hub couplings, CISPE Standard 310-97.
 - c. Charlotte Seal Gaskets, ASTM C-564-97, CISPI-HSN.
 - d. Warco-Quik-Tite Gaskets, ASTM C-564-94, CISPI-HSN.
 - e. Schedule 40, PVC-DWV drainage pattern, conforming to the following standards:
 - 1) ASTM D-1784 – Rigid PVC Vinyl Components.
 - 2) ASTM D-1785 – PVC Plastic Pipe, Schedule 40.
 - 3) ASTM D-2665 – PVC Drain, Waste and Vent Pipe and Fittings.
 - 4) ASTM D-2564 – Solvent Cements for PVC Pipe and Fittings.
 - 5) NSF Standard 14 – Plastic Piping Components and Related Materials.
 - f. Pipe Size 15” – PVC pipe and fittings, ASTM D-3034 or ASTM F-679, SDR35 gasket.
 - g. Pipe Size 18”, 21”, 24” and 27” – PVC pipe and fittings, ASTM F-679, SDR35 gasket.
 - h. PP Schedule 40 polypropylene, ASTM D635 and ASTM F1412, drainage pattern, mechanical joint stainless-steel components, ASTM B117.
Polypropylene shall be used where indicated on the drawings and as specified herein.
 2. Above-ground piping:
 - a. No-hub cast iron pipe and fittings, CISPI Standard 301, ASTM A-888-98el.
 - b. No-hub couplings, CISPI Standard 310.
 - c. Charlotte Seal Gaskets, ASTM C-564, CISPI-HSN.
 - d. Warco-Quik-Tite Gaskets, ASTM C-564-97, CISPI-HSN.
 - e. 2” and smaller Type DWV hard-drawn copper tubing, ASTM B-306 with copper drainage pattern and (lead-free) solder 95-5 Tin-antimony.

- f. Schedule 40, PVC-DWV drainage pattern, conforming to the following standards:
 - 1) ASTM D-1784 – Rigid PVC Vinyl Components.
 - 2) ASTM D-1785 – PVC Plastic Pipe, Schedule 40.
 - 3) ASTM D-2665 – PVC Drain, Waste and Vent Pipe and Fittings.
 - 4) ASTM D-2564 – Solvent Cements for PVC Pipe and Fittings.
 - 5) NSF Standard 14 – Plastic Piping Components and Related Materials.
3. Steamers, commercial type dishwashers, commercial laundry equipment, and similar high temperature drainage piping, including the deep seal P-Trap from the floor drain to main branch run, shall be cast iron or polypropylene, no exceptions.
4. ½" to 1": Same as domestic water, Type "L" hard-drawn, or Schedule 40 PVC pipe and solvent joint fittings.
5. 1-1/4" to 2" copper drainage tube, DWV Kitchen (Kitchen sinks and equipment waste).
6. Soda conduits shall be long sweep PVC conduit ells (R=24 inches) with solvent joints.
7. Elevator sump pump discharge pipe, inside pit shall be Schedule 40 galvanized steel A53/A106 with black, cast iron drainage fittings with threaded joints. Discharge piping beyond elevator pit wall, below slab, to be similar to sanitary waste, Schedule 40 PVC-DWV.
8. PVC Foam core DWV pipe, ASTM F891, is not and shall not be approved under any circumstances nor installed on this project.

2.2 MECHANICAL JOINT SYSTEMS

- A. General:
 1. All couplings, fittings, and gaskets shall be the products of a single manufacturer.
 2. Valve ends shall be compatible with the couplings used on the connecting piping.
- B. Pipe Wall Thickness (Schedule Number):
 1. Where rolled groove joints are used, the pipe wall thickness may, in some cases, be decreased below that specified for the particular fluid system. In all cases, the minimum pipe wall thickness shall be in accordance with ANSI/ASME B31.9, Chapter II, using 150% of the system operating pressure as the design pressure.
 2. Pipe having cut (machined) grooves shall have a nominal wall thickness of not less than the wall thickness specified for Schedule 40 pipe of the particular pipe size.
 3. Non-metallic pipe shall not be joined with grooved-end pipe mechanical joints.
- C. Couplings:
 1. Mechanical joint couplings shall be of the external type, for use with cut or rolled-groove end pipes, fittings, and valves.
 2. Couplings shall be self-centering and shall engage and lock-in-place the grooved-end pipes, fittings, and gaskets.
 3. All couplings shall be of the rigid style. Flexible couplings shall not be used without the written approval of the Engineer.
 4. Couplings shall be Ductile Iron, ASTM A536; or malleable iron, ASTM A47, and shall be designed for not less than 250 psig at 230 Deg. F.
 5. The coupling assembly shall be held together by two or more track-head, oval-neck steel bolts, ASTM A183.

PART 3 – EXECUTION

3.1 INSTALLATION

A. General:

1. Furnish and install piping, fittings and appurtenances required to complete the piping systems shown on the drawings. Elbows shall be long radius type. Tees may not be field fabricated.
2. Run piping to true alignment, generally parallel or perpendicular to building walls, floors and ceilings, and with uniform grades and spacing, so as to present a neat and workmanlike appearance.
3. Care shall be paid to the exact locations of piping with respect to equipment, ducts, conduits, slabs, beams, lighting fixtures, columns, ceiling suspension systems, etc. to provide maximum access to mechanical and electrical equipment in the building. Close coordination and cooperation shall be exercised with other trades in locating the piping in the best interests of the Owner. The drawings and specifications covering other work to be done in the building shall be carefully studied and arrangements made to avoid conflict.
4. Not all necessary pipe offsets are indicated on the drawings because of the small scale. The various runs of piping to be installed shall be studied and adjustments made in exact routings as may be required for proper installation.
5. Conflicts arising during the erection of piping shall be brought to the attention of the Owner's Representative. No improvising or field changes will be permitted without the approval of the Owner's Representative.
6. Use full lengths of pipe wherever possible. Short lengths of pipe with couplings will not be permitted. Cut to exact measurement and install without forcing or spring unless otherwise shown on the drawings or specified.
7. Avoid tool marks and unnecessary pipe threads. Burrs formed when cutting pipe shall be removed by reaming. Before installing any pipe, care shall be taken that the inside is thoroughly cleaned and free of cuttings and foreign matter. Measures shall be taken to preserve this cleanliness after erection.
8. Arrange pipe connections to valves and specialties so that there is clearance for easy removal of the valve or specialty from the line, and also for the removal of the valve bonnet and interior, and the specialty top and bottom and interior, except where otherwise approved by the Owner's Representative.
9. Erect piping in such a manner so as to obtain sufficient flexibility and to prevent excessive stresses in materials and excessive bending movements at joints or connections to equipment. Make allowances throughout for expansion and contraction of piping. Provide each riser and horizontal run of piping with expansion loops, expansion joints, or expansion compensators where indicated and required. Securely anchor and adequately guide pipe as required or where indicated to force expansion to the expansion device without bending, binding, or misalignment of pipe. Branch connections from mains to risers shall be made with ample swing or offset to avoid undue strain on fittings or short pipe lengths. Where indicated, in lieu of expansion loops, expansion joints, or expansion compensators, horizontal runs of pipe shall be anchored at approximately midway of the run to force expansion, evenly divided, toward the mains and risers to provide for expansion and contraction of piping. Flexibility shall be provided by installing one or more turns in the line so that piping will spring enough to allow for expansion without straining.

10. Installed piping shall not interfere with the operations or accessibility of doors or windows and shall not encroach on aisles, passageways and equipment, and shall not interfere with the servicing or maintenance of any equipment. Adjacent pipelines shall be grouped in the same horizontal or vertical plane.
11. Where lines are purposely pitched for drainage, an accurate grade shall be maintained. No lines shall be supported in such a manner as to permit deflection, due to gravity, sufficient to pocket the lines when full of liquid. Grade mains as indicated by arrows on the drawings and in accordance with gradient as indicated in attached Piping Schedule.
12. Piping found to have water hammer or other objectionable vibrations which cannot be eliminated by proper grading or other natural means, shall be braced, trapped or hung with shock absorbing hangers and equipped with air chambers, mechanical shock absorbers, flexible pipe connections or otherwise silenced using approved means.
13. Use building steel wherever possible for supporting pipe hangers. Main structural steel shall not be drilled, cut or burned for hangers without the approval of the Owner's Representative. Expansion bolts shall be used only upon the approval of the Owner's Representative.
14. Install unions or flanges in piping connections to equipment, regulating valves, and wherever necessary to facilitate the dismantling of piping and/or removal of valves and other items requiring maintenance.
15. Avoid bushings. Reducing fittings shall be used wherever practical.
16. The drawings indicate the size of piping and connections, and if certain sizes are omitted or unclear, obtain additional information before proceeding.
17. The piping drawings have been worked out with a view to the most economical installation, taking into consideration accessibility and appearances, and the Contractor must follow the drawings accurately and if it is found impractical to install the work in accordance with the drawings and specifications, the Contractor shall notify the Owner's Representative before making any changes and get their approval or revised drawings before proceeding with the work. Verify all measurements on the job before cutting pipes or having piping fabricated, and be responsible for the correct location of all pipe connections, also check sizes and standard of outlets on the equipment, including the dimensions and drilling of flanges, etc.
18. Copper tubing and galvanized steel shall not be mixed in any one run of piping.
19. Change in direction shall be made with fittings, except that bending of steel and copper pipe 4 inches and smaller will be permitted, provided a pipe bender is used and wide sweep bends are formed. The centerline radius of bends shall be not less than 6 diameters of the pipe. Bent pipe showing kinks, wrinkles, flattening, or other malformations is not acceptable.
20. Threaded joints shall be made with tapered threads in accordance with ANSI B2.1, and made tight with an approved pipe thread joint compound or material, applied to the male threads only. Use compounds sparingly and apply with caution to ensure that compounds do not enter piping systems. When pipe joint is made up a maximum of 3 threads shall be visible.
21. Joints for plastic pipe shall be made in accordance with PPI Piping Manual.
22. Connections between ferrous and nonferrous metallic pipe shall be made with dielectric unions or flanges.
23. Connections between plastic and metallic pipe, between plastic and glass pipe, and between metallic and glass pipe, shall be made with transition fittings manufactured for the specific purpose.

24. Unions and flanges shall not be concealed in walls, partitions, or above inaccessible ceilings.

C. Plumbing Systems Additional Requirements:

1. Bends, plugs, or tees in water service lines, except soldered or screwed joints, shall be braced or clamped. The connection between the water service line and the domestic water distribution line shall be anchored by means of tie rods and pipe clamps.
2. Before connecting the domestic water system to underground supply connections, each supply connection shall be thoroughly flushed of all foreign matter.
3. Vertical cast iron soil pipe hubs inside buildings shall extend 6 inches above concrete slab-on-grade floors.
4. Provide test tees with screwed plugs in waste and vent systems to isolate sections of system previously tested from section of system under test. Distance between test tees on vertical lines shall not exceed static height allowable for system pressure limitations. All joints in test tees, including plugs, shall be tested under pressure as specified for system tests.
5. Joints between cast iron pipe and copper tube shall be made by using a brass-caulking ferrule and properly soldering the copper tube to the ferrule prior to pouring the lead.
6. Joints between cast iron and vitrified clay piping shall be made using either hot poured bitumastic compound, or by a preformed elastomeric ring conforming to ASTM C564. The ring shall, after ramming, completely fill the annular space between the cast iron spigot and the vitrified clay hub.
7. Joints between copper tubing and threaded pipe shall be made by the use of brass adapters or dielectric fittings. The joint between the copper tubing and the fitting shall be soldered, and the connection between the threaded pipe and the fitting shall be a standard pipe size screw joint.
8. Joints between steel and cast-iron pipe shall be either caulked or threaded, or made with approved adapter fittings.
9. Install horizontal drainage piping in uniform alignment at uniform slopes that will produce a computed velocity of not less than 2 feet per second when flowing half full, or a minimum of 1/8" per ft. unless noted otherwise.
10. The underground water service pipe and the building sewer shall be not less than 10 feet apart horizontally, and shall be separated by undisturbed, or compacted, earth, unless the following requirements are satisfied:
 - a. The water service pipe and the building sewer may be installed in the same trench, provided written approval is given by the plumbing official and the following conditions are met:
 - 1) The bottom of the water service pipe at all points shall be not less than 12 inches above the top of the sewer line at its highest point.
 - 2) The water service pipe shall be placed on a solid shelf excavated at one side of the common trench.
 - 3) The number of joints in the service pipe shall be kept to a minimum.
 - 4) The materials and joints in the sewer pipe shall be installed in such manner, and shall possess the necessary strength and durability, to prevent the escape of solids, liquids, and gases there from under all known adverse conditions such as corrosion, strains due to temperature changes, settlements, vibration, and superimposed loads.

- 5) Where the water service line must cross the building sewer line, the bottom of the water service line within 10 feet of the point of crossing shall be at least 12 inches above the top of the sewer line. The sewer line shall be of cast iron, with leaded or mechanical joints, within 10 feet of the point of crossing.
 11. Provide access panel for all valves located above non-accessible ceiling. Coordinate with Architectural plans for exact locations.
 12. Provide clean-outs at the base of all sanitary waste and vent stacks.
 13. When a PVC or CPVC piping system is employed, the final rough-in piping shall transition from CPVC to Type "L" copper tubing at penetration of wall construction to the fixture. The copper piping rough-in shall employ the usage of the "Hold Rite" support system to prevent movement of branch tubing. No exceptions.
 14. Installation of copper tubing shall be per FPC, ASTM B32-96, and per Copper Development Association and ASTM B828-92-E01.
 15. Install plugs or caps on all openings during the construction phase. The temporary plug shall be cap of same material as pipe. Duct tape is unacceptable for use as a plug for the construction phase.
 16. All penetrations of piping through walls shall be made insect proof, (i.e., penetrations of waste arms, hot and cold-water piping through walls below sinks, lavatories, water closets, etc.). The escutcheon plate does constitute an "insect proof" closure.
 17. Installation of CPVC tubing shall be per State of Florida Plumbing Code, "PPFA Installation Handbook for CPVC hot and Cold Water Piping" including Flow Guard Gold, Noveon, Inc. Contractor shall certify that he has been trained by manufacturer on techniques for installation of CPVC tubing systems. Manufacturer shall warranty materials and labor for a 5-year period against all leaks using CPVC tubing. CPVC tubing shall not be installed in the laundry or in areas where piping is subject to extreme physical damage, (i.e., the kitchen).
 18. Teflon tape shall be used on threaded connections. A CPVC/brass adapter nipple shall be installed where piping penetrates wall to connect to flush valves. Cast brass "drop-ear" elbows shall be secured to wall construction for copper run out to hose bibs and shower heads. CPVC stub-outs for lavatories and sinks may be used. CPVC shall not be used within 1'-0" of the gas water heater's flue vent or for hot water supply and return piping between gas water heater and storage tank. Expansion loops on hot water system shall be installed per manufacturer's instructions to suit temperature and pipe run.
 19. Mechanically formed branch connections, commonly termed extruded outlets, shall be made in a continuous operation consisting of producing a pilot hole, drawing out the tube/pipe surface to form an outlet and facing of the outlet rim (including beveling when required). An integral pipe heating operation may be included, after the cutting of the pilot hole on Schedule 40 wall thickness. The outlet device shall be fully adjustable to insure proper tolerance and complete uniformity of the joint. Materials should have a minimum elongation of 20-25% to be acceptable for forming.
 20. The extruded outlet and butt weld connection shall be in accordance with ASME Boiler and Pressure Vessel Code, as listed under ANSI B31 Standards.
- D. Plastic Pipe Systems Additional Requirements:
1. Joints between plastic pipe and other materials shall be subject to the following requirements:
 - a. Joints between different grades of plastic pipe shall be made by use of an approved adapter fitting.
 - b. Joints between the hub of cast iron soil pipe and plastic pipe shall be made by use of a mechanical joint of the compression or mechanical sealing type.

- c. Joints between plastic pipe and cast-iron pipe, steel pipe, glass pipe, copper tube, and other piping materials shall be made by use of an approved adapter fitting.
 - 2. Plastic pipe, fittings, and solvent cement used for domestic hot and cold-water service shall bear the NSF seal for potable water.
 - 3. Plastic pipe, fittings, and solvent cement shall not be used in systems where temperature, and operating pressure plus system static head, exceeds materials temperature and pressure limitations.
 - 4. Plastic vent piping shall not pass-through roofs, firewalls, or fire partitions. Plastic waste and vent piping shall be installed in fire rated pipe chases when passing through floors or approved fire stop sleeve.
 - 5. Plastic piping materials shall not be installed in air plenums, air chambers, or airshafts.
- E. Mechanical Joint System Additional Requirements: Install in strict accordance with the manufacturer's written installation instructions.

3.2 WELDING, BRAZING, AND SOLDERING

- A. Operator and Procedure Qualifications: All welding and/or brazing operators and all welding and brazing procedures shall be qualified in accordance with the requirements of Section IX of the ASME Boiler and Pressure Vessel Code.
- B. Welding:
 - 1. All pipe welding performed under this division of the specifications shall be examined in accordance with ANSI B31.1 requirement for each piping system. The pipe weld examination is hereby made a part of the work of this division of the specifications. An independent outside inspection firm, regularly performing this type of examination, shall be hired by the contractor or subcontractor performing the welding as part of the work of their contract. The examination shall be performed by a representative of the Inspection Company (hereafter called the Inspector) who is qualified and certified for each examination method required.
 - 2. The Inspection Company performing the examination shall certify in writing that all pipe welds performed under this contract conform to the requirements of ANSI B31.1 for each piping system and to all other governing codes.
 - 3. Before final acceptance of the welded piping, certified test reports shall be submitted for review. The reports shall include the following data: name and location of project, date of test, type of piping system, working pressure and temperature, standard used for testing and applicable test method, number and location of welds tested and names of persons performing test.
 - 4. Welders and procedures for fire protection system piping qualified in accordance with NFPA No. 13.
- C. Brazing: Silver braze joints in accordance with MSS-SP-73 "Silver Brazing Joints for Wrought and Cast Solder Joint Fittings".
- D. Soldering: Joints in copper tubing shall be made with solder type fittings. Outside surface of the tube where engaged in the fitting, and inside surface of the fitting in contact with the tube, shall be cleaned with an abrasive material before soldering. Self-cleaning compounds shall not be used. Care shall be taken to prevent annealing of tube and fittings when making connections. The solder joint shall be made with flux and wire form solder, except brazed joints. The flux shall be a mildly corrosive liquid or a petroleum-based paste containing chlorides of zinc and ammonium. Solder shall be applied and drawn through the full fitting length. Excess solder shall be wiped from joint before solder

hardens. Joints in copper tube sizes 2-1/2 inches and larger shall be made with heat applied uniformly around the entire circumference of the tube and fittings by a multi-flame torch. Use of oxyacetylene cutting torch in lieu of multi-flame torch is not permitted. Disassemble valves and other accessories that may be damaged by heat before soldering.

3.3 TESTING OF PIPING SYSTEMS:

- A. Each piping system, after erection, shall be subjected to a pressure test. The test requirements shall be as follows:
 - 1. Plumbing related systems shall be tested with water at not less than a 10-foothead. The water shall be kept in the systems for a period of not less than 15 minutes prior to start of visual examination. In lieu of water test, the systems may be tested with air at a uniform pressure of 5 psig, with no loss in pressure for a period of not less than 15 minutes.
 - 2. The building sewer shall be tested by insertion of a test plug at the point of connection with the public sewer and filled with water under a head of not less than 10 feet, with no drop in water level for a period of not less than 15 minutes.
 - 3. Leaks, if any, shall be located, repaired, and retested in accordance with the test method specified for the system in which the leaks are located.
- B. Prior to testing a system, the Contractor shall provide the proper Building Official and the Owner's Representative with not less than 72 hours notice of the proposed test. The Contractor shall obtain approval of the test results. Where written approval is required, the Contractor shall obtain such written approval, and submit a copy of the approval.
- C. Work requiring testing shall not be covered, or otherwise concealed, until testing is completed, and approval is granted.
- D. Work, or portions of work, that is altered in any way after testing and approval shall be retested, witnessed, and approval obtained.
- E. Systems requiring hydrostatic tests shall be protected from damage caused by freezing. After tests are completed drain all sections of pipe, including traps, or fill undrained sections and traps with antifreeze solution. Vent all high points to release vacuum and ensure complete drainage of closed systems and blow out piping with compressed air to remove trapped water.
- F. Duration of tests, unless specified otherwise, shall be the time required to examine each joint in the system being tested.
- G. Systems requiring hydrostatic testing under pressure shall be vented at high points to ensure that all piping is completely filled with the testing medium.
- H. Disconnect pressure boosting apparatus, or vacuum pumps, during the test time span specified for systems employing the pressure loss/time span test method.
- I. During tests, isolate system components that have test pressures less than pressures specified for system tests.
- J. Use clean soapy water applied to exterior of joints to locate leaks in systems using compressed air, dry carbon dioxide, or nitrogen, under positive pressure as a test medium.

END OF SECTION

SECTION 22 16 00
GAS PIPING

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Refer to Section 22 05 00 for requirements pertaining to Common Work Results for Plumbing Systems.

1.2 WORK INCLUDED

- A. Propane (P) & Natural Gas (G) Piping

1.3 DEFINITIONS

- A. The pipe sizes given in this document are nominal.

1.4 QUALITY ASSURANCE

- A. All material provided under this section shall be standard catalogued products of recognized manufacturers regularly engaged in the production of such products and shall be of the manufacturer's most recent design that is in regular production.
- B. Each item provided under this section shall meet the requirements for that item as installed and used, in accordance with the following standards:
 - 1. Metallic Piping Systems employing mechanical joints and grooved-end pipe - ASME/ANSI B-31.9
 - 2. All other metallic piping - ASME/ANSI B31.1
- C. Each piping system shall be in accordance with the system design pressures shown in paragraph 2.1 - Materials, this specification section.
- D. All materials provided under this section shall be new, except where the specifications and/or drawings permit the reuse of certain existing materials.

1.5 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this Section to the extent referenced. The publications are referenced in the text by the basic designation only.
- B. The work and materials listed in this Section shall be provided in accordance with the standards and requirements set forth in the applicable portions of the latest editions of the referenced publications.
- C. All cast iron soil pipe and fittings shall be marked with the collective trademark of the Cast Iron Soil Pipe Institute (CISPI) and be listed by NSF International.
 - 1. American National Standards Institute (ANSI) Standards
 - 2. American Petroleum Institute (API) Specification
 - 3. American Society of Mechanical Engineers (ASME) Publications
 - 4. American Society for Testing and Materials (ASTM) Publications
 - 5. American Welding Society (AWS) Publication
 - 6. American Water Works Association (AWWA) Standards

7. Cast Iron Soil Pipe Institute (CISPI) Standards
8. The Manufacturer's Standardization Society of the Valve and Fittings Industry (MSS) Publications
9. National Fire Protection Association (NFPA) Standards
10. National Sanitation Foundation (NSF) Testing Laboratory Standards.
11. Plastic Pipe Institute (PPI) Manual.
12. Underwriters Laboratories (UL)

1.6 SUBMITTALS

- A. All submittals shall be made in accordance with Section 22 05 00 Requirements.
- B. Submit a list identifying the specific type of material that will be used for each piping system. Include pipe, pipe fittings, valves and joints. Include the basic designation of the publication applicable for each type of material and method.
- C. Submit current welder qualifications for all welders proposed for this project. Welding certificates shall be for the company performing the welding at this project as directed in paragraph 3.2 - WELDING, BRAZING, AND SOLDERING.
- D. Submit certified welding inspection reports as directed in paragraph 3.2 - WELDING, BRAZING, AND SOLDERING.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Propane (P) Piping
 1. Natural gas system shall be in accordance with the Florida Fuel Gas Code 2010 and NFPA 54
 2. CSST piping - above ground: Corrugated stainless-steel tubing manufactured from ASTM A240, type 304 stainless steel with a minimum nominal wall thickness of 0.010". System shall comply with ANSI LC-1/CSA 6.26 "Standard for Fuel Gas Piping Using Corrugated Stainless-Steel Tubing (CSST). CSST shall have a extruded fire-retarded yellow polyethylene jacket meeting the flame spread and smoke density requirements of ASTM E-84.
 3. CSST piping - underground: Underground piping shall be manufactured and shall be in accordance with standards noted above. Underground piping shall consist of CSST sleeved with a black integral polyethylene sleeve. The external polyethylene sleeve shall be designed to withstand the superimposed loads. The external protective sleeve shall have internal vent channels lengthwise to direct any leakage along the pipe the end fittings. The construction of the pre-sleeved system shall provide the encasement and venting capabilities required by the code. Underground fittings may be used within the system. All metallic parts of the buried fittings shall be wrapped in a code-approved manner as recommended by manufacturer.
UNDERGROUND FITTINGS ARE NOT PERMITTED UNDER THE SLAB OF A BUILDING.
 4. Gas pipe venting shall be in accordance with Florida Fuel Gas Code 2010 and NFPA 54.
 5. Acceptable Manufacturers:
 - a. TracPipe
 - b. Gastite

PART 3 – EXECUTION

3.1 INSTALLATION

A. General:

1. Furnish and install piping, fittings and appurtenances required to complete the piping systems shown on the drawings. Elbows shall be long radius type. Tees may not be field fabricated.
2. Run piping to true alignment, generally parallel or perpendicular to building walls, floors and ceilings, and with uniform grades and spacing, so as to present a neat and workmanlike appearance.
3. Care shall be paid to the exact locations of piping with respect to equipment, ducts, conduits, slabs, beams, lighting fixtures, columns, ceiling suspension systems, etc. to provide maximum access to mechanical and electrical equipment in the building. Close coordination and cooperation shall be exercised with other trades in locating the piping in the best interests of the Owner. The drawings and specifications covering other work to be done in the building shall be carefully studied and arrangements made to avoid conflict.
4. Not all necessary pipe offsets are indicated on the drawings because of the small scale. The various runs of piping to be installed shall be studied and adjustments made in exact routings as may be required for proper installation.
5. Conflicts arising during the erection of piping shall be brought to the attention of the Owner's Representative. No improvising or field changes will be permitted without the approval of the Owner's Representative.
6. Use full lengths of pipe wherever possible. Short lengths of pipe with couplings will not be permitted. Cut to exact measurement and install without forcing or spring unless otherwise shown on the drawings or specified.
7. Avoid tool marks and unnecessary pipe threads. Burrs formed when cutting pipe shall be removed by reaming. Before installing any pipe, care shall be taken that the inside is thoroughly cleaned and free of cuttings and foreign matter. Measures shall be taken to preserve this cleanliness after erection.
8. Arrange pipe connections to valves and specialties so that there is clearance for easy removal of the valve or specialty from the line, and also for the removal of the valve bonnet and interior, and the specialty top and bottom and interior, except where otherwise approved by the Owner's Representative.
9. Erect piping in such a manner so as to obtain sufficient flexibility and to prevent excessive stresses in materials and excessive bending movements at joints or connections to equipment. Make allowances throughout for expansion and contraction of piping. Provide each riser and horizontal run of piping with expansion loops, expansion joints, or expansion compensators where indicated and required. Securely anchor and adequately guide pipe as required or where indicated to force expansion to the expansion device without bending, binding, or misalignment of pipe. Branch connections from mains to risers shall be made with ample swing or offset to avoid undue strain on fittings or short pipe lengths. Where indicated, in lieu of expansion loops, expansion joints, or expansion compensators, horizontal runs of pipe shall be anchored at approximately midway of the run to force expansion, evenly divided, toward the mains and risers to provide for expansion and contraction of piping. Flexibility shall be provided by installing one or more turns in the line so that piping will spring enough to allow for expansion without straining.

10. Installed piping shall not interfere with the operations or accessibility of doors or windows and shall not encroach on aisles, passageways and equipment, and shall not interfere with the servicing or maintenance of any equipment. Adjacent pipelines shall be grouped in the same horizontal or vertical plane.
 11. Where lines are purposely pitched for drainage, an accurate grade shall be maintained. No lines shall be supported in such a manner as to permit deflection, due to gravity, sufficient to pocket the lines when full of liquid. Grade mains as indicated by arrows on the drawings and in accordance with gradient as indicated in attached Piping Schedule.
 12. Use building steel wherever possible for supporting pipe hangers. Main structural steel shall not be drilled, cut or burned for hangers without the approval of the Owner's Representative. Expansion bolts shall be used only upon the approval of the Owner's Representative.
 13. Install unions or flanges in piping connections to equipment, regulating valves, and wherever necessary to facilitate the dismantling of piping and/or removal of valves and other items requiring maintenance.
 14. Avoid bushings. Reducing fittings shall be used wherever practical.
 15. The drawings indicate the size of piping and connections, and if certain sizes are omitted or unclear, obtain additional information before proceeding.
 16. The piping drawings have been worked out with a view to the most economical installation, taking into consideration accessibility and appearances, and the Contractor must follow the drawings accurately and if it is found impractical to install the work in accordance with the drawings and specifications, the Contractor shall notify the Owner's Representative before making any changes and get their approval or revised drawings before proceeding with the work. Verify all measurements on the job before cutting pipes or having piping fabricated, and be responsible for the correct location of all pipe connections, also check sizes and standard of outlets on the equipment, including the dimensions and drilling of flanges, etc.
- B. Gas Systems Additional Requirements:
1. Installation shall be in accordance with NFPA No. 54 and ANSI Z 223.1 unless specified otherwise herein.
 2. Provide a capped 6" dirt leg at the base of main risers.
 3. Valves in natural gas service shall be lubricated plug cocks.
 4. Horizontal pipe shall slope upward, in the direction of flow, at not less than 1/4 inch in 15 feet.
 5. Where piping is concealed, all plugged or capped openings shall be exposed and accessible. Bushings and unions shall not be used in concealed work.
 6. Branch connections shall be made on the side or top of the main for both up-feed and down-feed applications.
 7. Vent gas pressure regulator and safety shut-off reverse vent valve relief lines to outside the building individually. Relief lines from pressure switches may be combined in another line, or run separate, for venting to the outside.
 8. After testing is completed, and before connecting any appliances, all piping shall be fully purged. Piping shall not be purged into the combustion chamber of an appliance. The open end of piping systems being purged shall not discharge into confined spaces or areas where there are ignition sources unless the safety precautions recommended in NFPA No. 54, or ANSI Z 223.1 are followed.
 9. After the piping has been placed in operation, all equipment shall be purged and then placed in operation, as necessary.

3.2 TESTING OF PIPING SYSTEMS:

- A. Each piping system, after erection, shall be subjected to a pressure test. The test requirements shall be as follows:
 - 1. Gas Piping Systems shall be tested with air at not less than 25 PSIG for a period of not less than 15 minutes without showing any drop in pressure.
 - 2. Gas Distribution Systems utilizing Copper Viega Pro-Press fittings with SC Feature Contour Design shall be initially tested at a minimum of ½ psig but not more than 50 psig. Joints shall be visually examined for leaks.
 - 3. Leaks, if any, shall be located, repaired, and retested in accordance with the test method specified for the system in which the leaks are located.
- B. Prior to testing a system, the Contractor shall provide the proper Building Official and the Owner's Representative with not less than 72 hours notice of the proposed test. The Contractor shall obtain approval of the test results. Where written approval is required, the Contractor shall obtain such written approval, and submit a copy of the approval.
- C. Work requiring testing shall not be covered, or otherwise concealed, until testing is completed, and approval is granted.
- D. Work, or portions of work, that is altered in any way after testing and approval shall be retested, witnessed, and approval obtained.
- E. Duration of tests, unless specified otherwise, shall be the time required to examine each joint in the system being tested.
- F. During tests, isolate system components that have test pressures less than pressures specified for system tests.
- G. Use clean soapy water applied to exterior of joints to locate leaks in systems using compressed air, dry carbon dioxide, or nitrogen, under positive pressure as a test medium.

END OF SECTION

SECTION 22 17 00
PUMPS FOR PLUMBING SYSTEMS

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Refer to Division 1 for all requirements pertaining to General Provisions.

1.2 WORK INCLUDED

- A. Inline Circulator Pumps - Potable Water Service.

1.3 QUALITY ASSURANCE

- A. Maximum suction velocity shall be less than 10 FPS. Pump discharge velocity shall be less than to 14 FPS
- B. Pump selections shall be no more than 5% less than the scheduled pump efficiency.
- C. Maximum impeller diameter shall not exceed 85% of the cutwater diameter.
- D. Pump motors shall be NEMA Premium™ Efficiency as listed in Section 23 05 13 – Motor Requirements for HVAC Equipment. Motors for pumps with variable speed drive must have Class F insulation.
- E. Pumps shall be factory tested, thoroughly cleaned and painted. Discharge and suction shall be factory covered to protect the volute/impeller from dirt and damage during shipment and storage.
- F. Pumps shall be constructed with materials and standards which have been tested or proven and have published test data available if requested, stating that these materials and standards have been found acceptable for use in pump manufacturing by one or more of the following:
 - 1. American Society for Testing and Materials (ASTM)
 - 2. International Organization for Standardization (ISO)
 - 3. American National Standards Institute (ANSI)
 - 4. National Electrical Manufacturers Association (NEMA)

1.4 SUBMITTALS

- A. Submit dimensioned performance and product data for acceptance.
- B. Product data, along with installation operation and maintenance instructions, shall be included in the operation and maintenance manuals.
- C. Submit in accordance with Division 1 Requirements.
- D. Additional submittal requirements:
 - 1. Submit pump curves with pump operating point plotted brake horsepower and pump efficiency indicated on curve.
 - 2. Where two or more pumps are operating in parallel, submit combined pump curve with all pump operating points plotted, system curve indicated, and brake horsepower and pump efficiency indicated on curve.
 - 3. Where pumps are used in open type systems (i.e., condenser water) submit net positive suction head curve (NPSH) with the system requirements plotted.

PART 2 – PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Inline Circulator Pumps - Potable Water Service:
 - 1. Armstrong Pump Company
 - 2. Aurora
 - 3. Bell & Gossett
 - 4. PACO
 - 5. Peerless
 - 6. Taco
 - 7. Weinman

2.2 EQUIPMENT

- A. Inline Circulator Pumps - Potable Water Service:
 - 1. Type: Centrifugal, single stage, close coupled in-line, back pull-out design, suitable for horizontal operation.
 - 2. Casing: Bronze split case, bronze fitted rated for 175 psi suction and discharge gauge tapping, flanged or threaded suction and discharge with companion flange bolts and gaskets.
 - 3. Impeller: Brass, totally enclosed, hydraulically and dynamically balanced, keyed to the shaft, and secured with a locknut.
 - 4. Shaft: Steel with copper sleeve through seal chamber.
 - 5. Seals: Carbon rotating against a stationary ceramic seat.
 - 6. Bearings: Oil lubricated bronze journal bearings.
 - 7. Drive: Direct close coupled with flexible coupling.
 - 8. Motor: Outdoor applications shall have a TEFC (Totally Enclosed Fan Cooled) motor and indoor locations shall have an open drip-proof motor; voltage and horsepower as scheduled. See Specification Section 23 05 13 for additional motor requirements.
 - 9. Range: 40°F to 230°F.

PART 3 – EXECUTION

3.1 GENERAL

- A. Install in accordance with manufacturers written instructions.

3.2 INSTALLATION

- A. Inline Circulator Pumps - Potable Water Service:
 - 1. Support pipe as close to pump as valve assemblies will allow.
 - 2. Provide adequate access and service area.

END OF SECTION

SECTION 33 11 00 – WATER UTILITY DISTRIBUTION

PIPING PART 1 - GENERAL

1.1 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.
- B. For water main construction within the public right-of-way and utility easements (as delineated on the plans) refer to the Standards and Specifications for Water and Wastewater Main Construction by Martin County Utilities, which is incorporated into these specifications by reference.

1.2 DESCRIPTION OF WORK

- A. Extent of water service piping work is shown on the drawings.
- B. Exterior water service piping work includes, but is not limited to, the following:
 - 1. Water main and service piping
 - 2. Control valves
 - 3. Fire hydrants
 - 4. Water meters
 - 5. Backflow prevention devices
- C. Comply with requirements of Section 03 30 00, Cast-in-Place Concrete for concrete work required in connection with exterior water service piping.

1.3 QUALITY ASSURANCE

- A. Installer: A firm with at least two (2) years of successful installation experience on exterior water service piping projects similar to this project.
- B. Code Compliance: Comply with applicable portions of National Standard Plumbing Code, local plumbing codes, the NSF International Standard 61, AWWA Standards, Martin County Utilities standards and the regulations of the Florida Department of Environmental Protection, and NFPA 24.

1.4 SUBMITTALS

- A. Product Data: Submit manufacturers' technical data and installation instructions for each major component for the water system materials and products.

- B. Submit drawings labeled as "Record Drawings" containing the following information, signed, and sealed by a Registered Land Surveyor (State of Florida):
 - 1. Location of water main tied to the project coordinate system or an acceptable baseline (base line shall be tied to property lines).
 - 2. Location of each valve, fitting, service line, blow off points, etc.
 - 3. Length and location of service lines.
 - 4. Fire hydrant locations, shut off valve, type of hydrant used, and distance from centerline of pumper nozzle to finish grade.
 - 5. Valve types used.
 - 6. Type of material used, mains and services. Indicate all locations of changed materials including mechanical joint vs. slip joints.
 - 7. Indicate depth of cover over water mains if other than 30 inch, or at 100 ft. intervals (minimum).
 - 8. Dimensions between pipes, elevations of pipes, and actual pipe materials where water lines cross sanitary sewer, reclaimed water and/or storm lines when the separation is less than the minimum 18-inch vertical clearance.
 - 9. Include any additional information specifically required by agencies having jurisdiction and the FDEP permit for this project.
- C. An electronic copy of the Record Drawing shall be provided to the Architect in AutoCADD format prior to final acceptance of the work.
- D. Maintenance Data: Submit maintenance data and parts lists for water system materials and products. Include this data, shop drawings, product data and record drawings in a maintenance manual to be presented to the Owner at project closeout.

PART 2 - PRODUCTS

2.1 POLYVINYL CHLORIDE PIPE (PVC)

- A. PVC pipe of nominal diameter four (4) through twelve (12) inches shall be manufactured in accordance with AWWA Standard C900, latest edition. The PVC pipe shall have a minimum working pressure rating of 150 psi and shall have a dimension ratio (DR) of 18 for all potable water or combination systems. The PVC pipe shall have a minimum working pressure rating of 200 psi and shall have a dimension ratio (DR) of 14 for all fire water systems. Pipe shall have the same O.D. as ductile iron pipe. Pipe shall have a color of blue or white with blue stripes.
- B. PVC pipe smaller than three (3) inches shall be Polyethylene (PE) Pressure Pipe and Tubing in accordance to AWWA C-901, latest edition. The pipe shall bear the National Sanitation Foundation (NSF) logo for potable water use. Pipe shall have a color of blue or white with blue stripes.
- C. PVC pipe joints shall have integral bell push-on type joints conforming to ASTM D-3139.
- D. PVC pipe fittings shall be mechanical joint ductile iron or gray iron conforming to ANSI/AWWA A21.10/C110, 250 psi minimum pressure rating, or ductile iron compact fittings three (3) through twenty-four (24) inches in accordance with ANSI/AWWA A21.53/C153.

Pipe fittings shall not contain more than 0.25% lead, and any solder or flux shall not contain more than 0.2% lead. All fittings shall be mechanically restrained.

2.2 DUCTILE IRON PIPE (DIP)

- A. Ductile iron pipe shall be cement-mortar lined, Pressure Class 350, mechanical or push-on joint and shall meet all the requirements of the following: AWWA C-104; AWWA C-111 (for rubber gasket joints); AWWA C-150 (for thickness design); and AWWA C-51 (for D.I.P. molds).
 - 1. Lining: All ductile iron pipe and fittings shall be cement-mortar lined and seal coated in conformance with ANSI A-21.4.
 - 2. Joints: Pipe joints shall be mechanical or push-on joints, except where specifically shown or detailed otherwise.
 - 3. Pipe Fittings: All fittings 4" in diameter and larger shall be mechanical joint ductile iron or gray iron conforming to ANSI/AWWA A21.10/C110, 250 psi minimum pressure rating, or ductile iron compact fittings three (3) through twenty-four (24) inches in accordance with ANSI/AWWA A21.53/C153. Pipe fittings shall not contain more than 0.25% lead, and any solder or flux shall not contain more than 0.2% lead. Mortar lining and seal coat for fittings shall be same thickness specified for pipe. All fittings shall be mechanically restrained.

2.3 GASKET MATERIAL

- A. Gaskets: The rubber-ring gaskets shall be suitable for the specified pipe sizes and pressure and shall conform to applicable parts of the latest Federal Specification WW-F-421 and AWWA/ANSI C111/A21.11 and shall be furnished with the pipe.
- B. Joint Lubricant: The joint lubricant for push-on joint pipe shall have been tested and approved for potable water service. No lubricant shall be used that will harbor bacteria or damage the gaskets.

2.4 CONTROL VALVES

- A. General: Provide valves and flow control devices as indicated. All valves 4" and larger shall be furnished with mechanical joint ends.
 - 1. Minimum working pressure, 200 psi unless otherwise indicated.
- B. Gate Valves (4" and larger): Resilient seat type with non-rising stem, except use rising stem valves above ground, cast iron body meeting ASTM A126 and bronze fittings conforming to AWWA C-509. Gate valves located on fire protection mains must be FM approved. All ferrous surfaces inside and outside shall have a fusion-bonded epoxy coating. A 2 inch wrench nut shall be provided for operating the valve in a buried installation.

- C. Valve Boxes: Shall be of cast iron three piece boxes with adjustable top. The size shall be large enough for operation of the valve on which it is used with a minimum shaft diameter of 5-1/4". The cover shall have the word "WATER" cast on it.
- D. Gate Valves (Smaller than 4"): Shall be non-rising stem, hand-wheel operated, wedge discs, all bronze with flanged ends, conforming to Fed. Spec. WW-V-54, Class B, Type
 - 1. For below ground installation, valves shall be furnished with mechanical joint ends or iron pipe thread and 2" square operating nut.

2.5 THRUST RESTRAINTS

- A. General: Provide mechanical pipe joint restraints as necessary to prevent movement of pipe or piping system appurtenances in response to thrust exerted by water under pressure.
 - 1. All mechanical constraints shall be galvanized or otherwise rust-proofed as approved by the Engineer.
 - 2. Concrete thrust block are NOT an acceptable form of mechanical restraint.

2.6 METER ASSEMBLIES

- A. General: The Contractor shall furnish and install all water meters and backflow prevention devices. Back flow prevention devices shall be furnished, installed and certified by the Contractor.
 - 1. The Contractor shall coordinate with Martin County Utilities for the water meters to be furnished and installed by the Contractor.
 - 2. Contractor to paint all above-ground potable water piping and backflow assemblies blue and all fire line piping and backflow assemblies red. **Stainless steel components of the assemblies shall not be painted.**
 - 3. Provide backflow preventers conforming to requirements of the water utility. Checks shall have reversible elastomer discs and shall produce drip tight closure against back- pressure or back-siphonage. If a bypass line is required, it shall include a meter, small diameter reduced pressure zone assembly, and isolation valves. All elements shall be lead free.
 - a. Double Check type larger than 2 inches shall consist of two independent check modules within a single housing, with sleeve access, four test cocks, and two drip- tight shutoff valves. Checks shall be removable and serviceable without the use of special tools. The housing shall be constructed of type 304 (Sch. 40) stainless steel pipe with grooved-end connections.
 - b. Reduced Pressure Zone Assembly type larger than 2 inches shall consist of two independent torsion spring check modules, a differential pressure relief valve located between and below the two modules, two drip-tight shutoff valves. Torsion spring check modules and relief valve shall be contained within a sleeve accessible single housing constructed of type 304 (Sch. 40) stainless steel pipe with grooved- end connections.

- c. Reduced Pressure Zone Assembly type 2 inches or smaller shall be constructed using lead-free silicon bronze with polymer check valve seats, stainless relief valve seats, stainless steel springs, and threaded connections. The Assembly shall consist of a pressure differential relief valve located in a zone between two positive seating check valves. Back-siphon protection shall include provision to admit air directly into the reduced pressure zone via a channel separate from the water discharge channel, or directly into the supply pipe via a separate vent. Install an isolation valve within 2 feet of the meter of connection point before backflow assembly.
- d. Backflow preventers shall be above grade assemblies only.
- e. Backflow prevention devices for both potable water and non-potable shall comply with these requirements.
- f. Provide isolation valve within 2 feet upstream of all backflow prevention devices serving lift stations or dumpster area hose bibs.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. General: Install water piping system in compliance with local governing regulations.
- B. Install all backflow preventers 12 to 28 inches above grade to bottom of center of unit, unless otherwise required by the utility provider.
- C. Water Service Piping: Extend water service piping of size and in locations indicated to water service entrance at buildings. Connections shall be made 5'-0" outside of building lines.
- D. Polyvinyl Chloride (PVC) Pipe and Fittings: Install in accordance with Uni-bell Handbook of PVC Pipe and in accordance with AWWA C-900.
- E. All PVC pipe 4 inches and larger shall have a #10 GA copper trace wire located directly above the line and terminate on a metal device accessible from the surface without excavation. In addition, plastic marker tape marked "WATER" shall be located no less than 2 feet directly above the water main. Owner's representative shall field verify the tape and locator wire installations prior to backfilling the trench.
- F. Control Valves: Install in accordance with manufacturer's instructions.
- G. Fire Hydrant Assemblies: Install in accordance with Martin County Utilities and Fire Department requirements.
- H. Interior Inspection: Inspect conduit to determine whether line placement or other damage has occurred.
 - 1. If the inspection indicates poor alignment, debris, displaced pipe, infiltration, or defects, correct such defects to satisfaction of Architect/Engineer.

- I. Cleaning Conduit: Clear interior of conduit of dirt and other superfluous material as work progresses. Maintain swab or drag in line and pull past each joint as it is completed.
- J. Place plugs in end of uncompleted conduit at end of day or whenever work stops.
- K. Disinfection: At completion of water service line installation, flush and disinfect in conformance with AWWA C-651 and local authorities having jurisdiction. Contractor shall provide satisfactory bacteriological test reports at the locations indicated in the Florida Department of Environmental Protection Water Permit and/or as directed by the Engineer of Record. The costs of these tests shall be the responsibility of the Contractor.
- L. Utility Crossings: Contractor shall notify the Engineer-of-Record of all utility crossings between potable water lines and sanitary or storm mains. Notification shall be provided in such a manner as to allow the Engineer-of-Record to inspect the crossing prior to backfilling activities.

3.2 TESTING

- A. Hydrostatic and Leakage Test: All pipe of whichever size and material installed on the project for the purpose of conveying water or liquid under pressure shall be tested after installation in accordance with the applicable portions of the hydrostatic tests for PVC pipe in AWWA C 605 and for DIP in AWWA C 600. Tests shall be made on sections not exceeding 2,000 feet. Acceptable leakage must be less than the number of gallons per hour as determined by the following formula:

For PVC Pipe:

$$L = \frac{ND(P)^5}{133,200}$$

Where:

L = Allowable leakage, in gallons per hour
N = Length of pipe tested, in feet
D = Nominal diameter of pipe, in inches
P = Average test pressure during leakage test, in psig

$$L \leq \frac{SD\sqrt{P}}{133,200}$$

Where:

L=Allowable leakage, in gallons per hour
S=Length of pipeline tested, in feet
D=Nominal diameter of pipe, in inches
P=Average test pressure during leakage test, in psig

- B. All fire lines shall be tested to 200 psi test pressure for two (2) hours duration. Potable water lines shall be tested to 150 psi test pressure for two (2) hours. All gauges and appurtenances necessary shall be furnished by the Contractor. All leaks shall be repaired by removing and replacing defective pipe and joints with pipe and joints free of defects, after which the lines shall be retested. Such repair and retesting shall be done until the lines pass the specified test. The Engineer-of-Record, or their designee, shall be present for the hydrostatic testing.
- C. All valves shall be hydrostatically tested with the line in which they are installed.
- D. Perform operation testing of hydrants and valves by opening and closing under water pressure to ensure proper operation.
- E. Backflow prevention devices shall be field tested after installation. Copies of test report shall be provided as follows:
 - 1. Submit copy to MCPS grounds irrigation representative
 - 2. Submit copy to Engineer of Record

3.3 BACKFILLING

- A. Conduct backfilling operations of open-cut trenches closely following laying, jointing, and bedding of pipe, and after initial inspection and testing are completed.

3.4 PLACING SYSTEM INTO SERVICE

- A. General: The water system shall not be placed into service until all required testing has been completed, approved by the Engineer, and a "Clearance for Use" certification has been issued by the Florida Department of Environmental Protection.
- B. The Contractor is required to provide the required acceptable hydrostatic and bacteriological test results and a sealed certified as-built drawing of the utility installation to the Engineer-of-Record.

END OF SECTION 33 11 00

SECTION 33 31 00 – SANITARY UTILITY SEWERAGE PIPING

PART 1 - GENERAL

1.1 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.

1.2 SCOPE

- A. This section includes sanitary sewers and structures appurtenant thereto. Excavating, trenching, backfilling, and density tests are specified elsewhere. Sewage collection system work includes, but is not limited to, the following:

- Sanitary sewer conduits
 - Manholes, frames, and covers

- B. For sanitary sewer related construction on the project site, refer to the Standards and Specifications for Wastewater and Water Main Construction by Martin County Utilities, if more stringent than herein specified.
- C. Refer to Division 02 Sections for excavation and backfilling work related to sewer collection systems.
- D. Refer to Division 03 Sections for concrete work related to sewer collection systems.

1.3 QUALITY ASSURANCE

- A. Installer: A firm specializing and experienced in sewer work for not less than two years.
- B. Code Compliance: Comply with applicable portions of local plumbing codes, Martin County Utilities Standards and Specifications for Wastewater and Water Main Construction, and the Florida Department of Environmental Protection.

1.4 SUBMITTALS

- A. Product Data: Submit manufacturer's technical data and installation instructions for each major component for the sewage collection system materials and products.
- B. Record Drawings: At project close-out, submit drawings labeled as "Record Drawings" indicating all installed sewage collection system piping, manholes and products, signed, and sealed by a Registered Land Surveyor (State of Florida) containing the following:

1. Location of each manhole. Location of each sewer service at connection. Invert elevations of building services at tie-in. Rim elevations, bottom elevations and invert elevation of all pipes entering manholes. Slope of each segment (mains & services). Length and location of all plugged stub outs. Type of materials used. All horizontal locations required on record drawings shall be located according to the project coordinate.
- C. Maintenance Data: Submit maintenance data and parts lists for sewage collection system materials and products. Include this data, shop drawings, product data and record drawings in a maintenance manual to be presented to the Owner at project close-out.

PART 2 - PRODUCTS

2.1 CONDUIT MATERIALS

- A. General: Furnish ells, tees, reducing tees, wyes, couplings, increased superior physical and chemical properties as acceptable to the Architect/Engineer.
- B. Polyvinyl Chloride (PVC) Gravity Sanitary Sewer Pipe and Fittings: ASTM D-3034, Type PSM, SDR35.
 1. Color: Green.
- C. PVC Pipe Joints: Joints for PVC sewer pipe shall be rubber gasketed type complying in all respects to the physical requirements of ASTM D-3212 and ASTM F-477. Lubricant for jointing as approved by the pipe manufacturer shall be used for connecting PVC pipes.

2.2 CONCRETE MANHOLES

- A. Precast manhole sections shall be minimum 5" thick and 48" in diameter, conforming to ASTM C-478. Cones shall have same wall thickness and reinforcement as manhole section. Top and bottom of all sections shall be parallel. Joints shall be tongue-and-groove or Keylock type. Joints shall be formed using an approved joint sealer.
 1. Prior to the delivery of any size of precast section on the job site, yard tests will be conducted at the point of manufacture. The precast sections to be tested will be selected at random from the stockpiled material which is to be supplied for the job. All test specimens will be mat tested and shall meet the permeability test requirements of ASTM C-14.
- B. Coating System: All sanitary sewer manholes shall be provided with an interior and exterior coal tar epoxy coating. After the concrete has cured for 28 days, minimum, the precast units shall be coated by the manufacturer. The units shall be touched up in the field by the Contractor, if damaged. Interior and exterior surfaces of the manholes shall be coated in accordance with System A, B, or C below.

1. SYSTEM A (TNEMEC)

- a. Surface Preparation: SP-C2.
 - b. Finish: 2 coats of Tnemec 413 Tneme-Tar at 8.3-mil dry thickness, 11.4 wet (140 SFPG) per coat. Thin first coat 10 percent. Apply second coat within 96 hours.
 - c. Total Thickness (dry): 16.6-mil.
2. SYSTEM B (PORTER)
- a. Surface Preparation: SP-C2.
 - b. Primer: 1 coat of Porter Tarsset Concrete Primer at 4.0-mil dry thickness (260 SFPG).
 - c. Finish: 2 coats of Porter 7013 Tarsset C-200 Coal Tar Epoxy Black at 6.0-mil dry thickness (200 SFPG) per coat.
 - d. Total Thickness (dry): 16-mil.
3. SYSTEM C (KOPPERS)
- a. Surface Preparation: SP-C2.
 - b. Finish: 2 coats of Koppers Bitumastic 300M Water Epoxy at 8.0-mil dry thickness (200 SFPG) per coat.
 - c. Total Thickness (dry): 16-mil.
- C. Sewer Main Connection to Manholes: Manholes shall be provided with manufacturer installed rubber boots with stainless steel clamps for connection of gravity lines.
- D. Manhole Joint Seals: Preformed plastic gaskets shall meet all requirements of Federal Spec. SS- S- 00210.
- E. Manhole Frames and Covers: Traffic-bearing cast iron of size and shape detailed on the drawings. Covers shall have the word "sewer" in 2" raised letters. Castings shall be tough, close- grained gray iron, sound, smooth, clean, free from blisters, blowholes, shrinkage, cold shuts, and all defects. Plane or grind bearing surfaces to ensure flat, true surfaces. Covers shall be true and seat within ring at all points.
- F. Base Rock: Clean 3/4" gravel or crushed rock uniformly graded from coarse to fine conforming to requirements of FDOT specifications, 2013.
- G. Concrete: All concrete work shall conform to the requirements of Section 03 30 00, Concrete Work.
- H. Cleanouts: Provide as indicated, pipe extension to grade with brass ferrule and brass countersunk cleanout plug.
1. Provide a 12-inch by 12-inch concrete collar, 6 inches thick around all exterior cleanouts.

2.3 LOCATION AND IDENTIFICATION

- A. General: All PVC pipe 4 inches and larger shall have a #10 GA copper trace wire located directly above the line and terminate on a metal device accessible from the surface without excavation. In addition, plastic marker tape marked "SANITARY" shall be located no less than 2 feet directly above the gravity or force main. Owner's representative shall

field verify the tape and locator wire installations prior to backfilling the trench.

PART 3 - EXECUTION

3.1 INSTALLATION OF CONDUIT

- A. General: All PVC sewer shall be installed in accordance with Uni-Bell, UNI-B-5.
- B. Pipe Distribution: Distribute material on the job no faster than it can be used to good advantage. Unload pipe that cannot be physically lifted by workers from the trucks, by a forklift, or other approved means. Do not drop pipe of any size from the bed of the truck to the ground.
- C. Pipe Preparation and Handling: Inspect all pipe and fittings prior to lowering into the trench to ensure no cracked, broken, or otherwise defective materials are being used. Clean ends of pipe thoroughly. Remove foreign matter and dirt from inside of pipe and keep clean during and after laying.
- D. Use proper implements, tools, and facilities for the safe and proper protection of the work. Lower pipe into the trench in such a manner as to avoid any physical damage to the pipe. Remove all damaged pipe from the job site. Do not drop or dump pipe into trenches under any circumstances.

3.2 LINE AND GRADE

- A. Gravity Sewer Pipe: All sewer lines between manholes shall be absolutely straight and true. No curvature shall be tolerated. Do not deviate from line or grade, as established by the Engineer, more than 1/2" for line and 1/4" for grade, provided that such variation does not result in a level or reverse sloping invert.
 - 1. Establish line and grade for pipe by the use of lasers or by transferring the cut from offset stakes to batter boards set in the trench at maximum intervals of 25 feet. Maintain a minimum of three sets of batter boards with string line ahead of the pipe laying at all times.
- B. Laying and Jointing Pipe: Pipe laying shall proceed upgrade with spigot ends pointing in direction of flow. After a section of pipe has been lowered into the prepared trench, clean the end of the pipe to be joined, the inside of the joint, and the rubber ring immediately before joining the pipe. Make assembly of the joint in accordance with the recommendations of the manufacturer of the type of joint used. Provide all special tools and appliances required for the jointing assembly.
 - 1. After the joint has been made, check pipe for alignment and grade. The trench bottom shall form a continuous and uniform bearing and support for the pipe at every point between joints. Apply sufficient pressure in making the joint to assure that the joint is "home" as defined in the standard installation instructions provided by the pipe manufacturer. To assure proper pipe alignment and joint makeup, place sufficient pipe zone material to secure the pipe from movement before the next joint.
 - 2. When pipe is laid within a movable trench shield, take necessary precautions to prevent pipe joints from pulling apart when moving the shield ahead.

3. Take the necessary precautions required to prevent excavated or other foreign material from getting into the pipe during the laying operation. At all times, when laying operations are not in progress, at the close of the day's work, or whenever the workers are absent from the job, close and block the open end of the last laid section of pipe to prevent entry of foreign material or creep of the gasketed joints.
4. Plug or close off pipes that are stubbed off for manhole construction or for construction by others, with temporary plugs.
5. Take all precautions necessary to prevent the "uplift" or floating of the line prior to the completion of the backfilling operation.
6. Where non-reinforced pipe is connected to manholes or concrete structures, make connection so that the standard pipe joint is located not more than 3 feet from the outside edge of the structure.
7. When cutting and/or machining the pipe is necessary, use only tools and methods recommended by the pipe manufacturer.

3.3 UNDERGROUND STRUCTURES

- A. Rock Base: Prior to setting precast concrete base section, remove water from the excavation. Place a minimum of 6" of rock base and thoroughly compact with a mechanical vibrating or power tamper.
- B. Manhole Joint Seals: Carefully inspect precast manhole sections to be joined. Sections with chips or cracks in the tongue shall not be used. Joint seals shall be installed in strict conformance with the manufacturer's recommendations.
- C. Precast Concrete Manholes: Place precast concrete sections as shown on the drawings. Where manholes occur in pavements, set tops of frames and covers flush with finish surface. Elsewhere, set tops 3 inches above finish surface, unless otherwise indicated.
 1. Install frames and covers on top of manholes to positively prevent all infiltration of surface or groundwater into manholes.
 2. Frames shall be set in a bed of mortar with the mortar carried over the flange of the ring as shown in the Manhole Details on the drawings.
 3. Provide rubber joint gasket complying with ASTM C-443.
 4. Apply bituminous mastic coating at joints of sections.
- D. Manhole Invert: Construct manhole inverts in conformance with details shown on the drawings and to ensure an unobstructed flow through manhole. Remove sharp edges or rough sections which tend to obstruct flow. Where a full section of pipe is laid through a manhole, break out the top section and cover exposed edge of pipe completely with mortar. Trowel all mortar surfaces smooth.

3.4 BACKFILLING

- A. General: Conduct backfill operations of open-cut trenches closely following laying, jointing, and bedding of pipe, and after initial inspection and testing are completed.

1. Place backfill and compact in accordance with provisions of Section 31 20 00, Earthwork.
2. During backfill operations over pipelines, install the continuous trace wire directly above the pipe at a depth of 6-inches below finish grade.

3.5 CLEANING AND TESTING OF GRAVITY SEWERS

- A. Prior to final acceptance, the sewer collection system shall be thoroughly cleaned and visually inspected in the presence of the Engineer and local authorities. Visual inspection shall include closed circuit television inspection.
 1. Closed circuit television inspection shall be in conformance with Section V, "Recommended Specifications for Sewer Collection System Rehabilitation" published by the National Association of Sewer Service Companies.
- B. Following visual inspection, leakage testing shall be performed on all sewer lines and vacuum testing shall be performed on all sanitary structures.
- C. Required methods of testing shall be as follows and the Contractor shall furnish all necessary tools, supplies, labor, and equipment for testing.
 1. Leakage testing of sewer lines shall be low pressure air exfiltration tests performed in accordance with Uni-Bell, UNI-B-6, and in accordance with the local authority or utility provider requirements.
 2. Head pressure test (water) as required by the Florida Building Code.
 3. Vacuum testing of sanitary structures shall be in accordance with the local authority or utility provider requirements.
- D. Visual inspection and testing shall be performed on the same day. Notify Engineer one week in advance.
- E. Deflection Testing: Testing is required no sooner than 30 days after the final backfilling activities are completed on all sections of PVC piping. No section of pipe shall deflect more than 5% using a rigid ball or mandrel for the testing with a diameter not less than 95% of the base inside diameter of the pipe. Testing shall not be performed using mechanical pulling.
- F. Contractor shall provide a sealed, certified survey of the as-built conditions including locations, pipe sizing, separation distances from other utilities at pipe crossings, and invert data for the entire sanitary system.

3.6 PLACING SYSTEM INTO SERVICE

- A. General: The sewage collection system shall not be placed into service until all required testing has been completed, approved by the Engineer, and a "Clearance for Use" certification (if required) has been issued by the Florida Department of Environmental Protection.

SECTION 33 41 00 – STORM UTILITY DRAINAGE

PIPING PART 1 - GENERAL

1.1 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.

1.2 SCOPE

- A. This section includes storm sewers and structures appurtenant thereto. Excavating, trenching, backfilling and density tests are specified elsewhere. Storm sewer system work includes, but is not limited to, the following:
 - 1. Storm sewer conduits
 - 2. Storm sewer structures required by drawings
- B. Refer to applicable Division 02 sections for excavation and backfilling work related to storm sewer systems.

1.3 QUALITY ASSURANCE

- A. Installer: A firm specializing and experienced in storm sewer work for not less than two years.
- B. Code Compliance: Comply with applicable portions of local plumbing codes, the requirements of South Florida Water Management District and the Florida Department of Environmental Protection.

1.4 SUBMITTALS

- A. Product Data: Submit manufacturer's technical data and installation instructions for each major component for the storm sewer system materials and products.
- B. Record Drawings: At project closeout, submit record drawings of installed storm sewerage piping and products. All drawings must be labeled as "Record Drawings" and be signed and sealed by a Professional Land Surveyor licensed in the State of Florida. Drawings shall include as a minimum: horizontal locations, tied to project coordinate system, of all structures (area drains, catch basins, manholes, headwalls, etc.) and piping, rim elevations of all structures with invert elevations of all pipes entering structures, diameter and material of all piping, and the slope of each pipe segment. Verify all elements of drainage control structures, including rim elevations, elevation of slots, weirs and orifices, and invert elevation of all pipes entering structures. Refer to "Earthwork" Section 31 20 00 for record drawing requirements regarding grading, swales, lakes, and drainage retention areas.

- C. An electronic copy of the Record Drawing shall be provided to the Architect in AutoCADD format prior to final acceptance of the work.
- D. Maintenance Data: Submit maintenance data and parts lists for storm sewer system materials and products. Include this data, shop drawings, product data and record drawings in a maintenance manual to be presented to the Owner at project close-out.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Except as otherwise provided, all off-site storm sewer materials shall comply with the applicable sections of Martin County Standards which are hereby incorporated into these specifications by reference. All on-site storm sewer materials shall comply with the specifications contained herein.

2.2 CONDUIT MATERIALS

- A. Provide materials specified below:
 1. Polyvinyl Chloride (PVC), ASTM D-3034, SDR 35 pipe and fittings. Joints and fittings shall have elastomeric gasket joints manufactured in accordance with ASTM D-3212 and ASTM D-477.
 2. High Density Polyethylene Pipe (HDPE), 3-inch to 10-inch, in accordance with AASHTO M252 and ASTM D-3350, and shall have a smooth interior lining. Joints shall provide a water tight seal using elastomeric gaskets manufactured in accordance with ASTM D-3212 and ASTM F-477.
 3. High Density Polyethylene Pipe (HDPE), larger than 10-inch, in accordance with AASHTO M294, Type S, and ASTM D-3350. Joints shall provide a water tight seal using elastomeric gaskets manufactured in accordance with ASTM D-3212 and ASTM F-477.
 4. Round Reinforced Concrete Pipe (RCP) in accordance with ASTM C-76. Joints shall be bell and spigot type. The spigot end shall be grooved to accommodate a rubber O-ring gasket to provide a water tight seal conforming to the requirements of ASTM C-443.
 5. Corrugated Polypropylene Pipe (CPP), 12-inch to 60-inch, shall meet AASHTO M330 and ASTM F2881. Joints shall be bell and spigot, watertight, according to ASTM D3212. Gaskets shall meet the requirements of ASTM F477.

2.3 STORM SEWER STRUCTURES

- A. Provide materials and perform all work in accordance with Section 425 of the referenced FDOT Standard Specifications.
- B. Manhole Joint Seals: Preformed plastic gaskets shall meet all requirements of Federal Spec. SS- S- 00210.

- C. Manhole Frames and Covers: Traffic-bearing cast iron of size and shape detailed on the drawings. Covers shall have the word "STORM" in 2" raised letters. Castings shall be tough, close-grained gray iron, sound, smooth, clean, free from blisters, blowholes, shrinkage, cold shuts, and all defects. Plane or grind bearing surfaces to ensure flat, true surfaces. Covers shall be true and seat within ring at all points.
- D. Catch Basin Frames and Grates: Use cast iron grates and cast-in angle iron seats on all catch basin structures. Grates in paved areas shall be traffic bearing.
- E. Base Rock: Clean 3/4" gravel or crushed rock uniformly graded from coarse to fine conforming to requirements of FDOT specifications, 1996.
- F. Concrete: All concrete work shall conform to the requirements of Section 03 30 00, Cast-In-Place Concrete.
- G. Cleanouts: Provide as indicated, pipe extension to grade with brass ferrule and brass countersunk cleanout plug.
 - 1. Provide a 12-inch by 12-inch concrete collar, 6 inches thick around all exterior cleanouts.

2.4 SUMP PUMP

- A. Sump pump shall be Flygt Model SXV-3 0.75 hp 115 volts/7.0 amp or approved equivalent.

PART 3 - EXECUTION

3.1 GENERAL

- A. General: All construction operations shall adhere to the requirements of the referenced FDOT Standard Specifications.
- B. Conform to manufacturer's recommendations on the installation of RCP, PVC, and HDPE storm sewers.
- C. Pipe Distribution: Distribute material on the job no faster than it can be used to good advantage. Unload pipe which cannot be physically lifted by workers from the trucks, by a forklift, or other approved means. Do not drop pipe of any size from the bed of the truck to the ground.
- D. Pipe Preparation and Handling: Inspect all pipe and fittings prior to lowering into trench to ensure no cracked, broken, or otherwise defective materials are being used. Clean ends of pipe thoroughly. Remove foreign matter and dirt from inside of pipe and keep clean during and after installation.
- E. Use proper implements, tools, and facilities for the safe and proper protection of the work. Lower pipe into the trench in such a manner as to avoid any physical damage to the pipe. Remove all damaged pipe from the job site. Do not drop or dump pipe into

trenches under any circumstances.

3.2 LINE AND GRADE

- A. General: All sewer lines between structures shall be absolutely straight and true. No curvature shall be tolerated. Do not deviate from line or grade more than 1/2" for line and 1/4" for grade, provided that such variation does not result in a level or reverse sloping invert.
 - 1. Establish line and grade for pipe by the use of lasers or by transferring the cut from offset stakes to batter boards set in the trench at maximum intervals of 25 feet. Maintain a minimum of three sets of batter boards with string line ahead of the pipe laying at all times.

- B. Laying and Jointing Pipe: Pipe laying shall proceed upgrade with spigot ends pointing in direction of flow. After a section of pipe has been lowered into the prepared trench, clean the end of the pipe to be joined and the inside of the joint immediately before joining the pipe. Make assembly of the joint in accordance with the recommendations of the manufacturer of the type of joint used. Provide all special tools and appliances required for the jointing assembly.
 - 1. After the joint has been made, check pipe for alignment and grade. The trench bottom shall form a continuous and uniform bearing and support for the pipe at every point between joints. Apply sufficient pressure in making the joint to assure that the joint is "home" as defined in the standard installation instructions provided by the pipe manufacturer. To assure proper pipe alignment and joint makeup, place sufficient pipe zone material to secure the pipe from movement before the next joint is installed.
 - 2. When pipe is laid within a movable trench shield, take necessary precautions to prevent pipe joints from pulling apart when moving the shield ahead.
 - 3. Take the necessary precautions required to prevent excavated or other foreign material from getting into the pipe during the laying operation. At all times, when laying operations are not in progress, at the close of the day's work, or whenever the workers are absent from the job, close and block the open end of the last laid section of pipe to prevent entry of foreign material or creep of the joints.
 - 4. Plug or close off pipes which are stubbed off for structure construction or for construction by others, with temporary plugs.
 - 5. Take all precautions necessary to prevent the "uplift" or floating of the line prior to the completion of the backfilling operation.
 - 6. Where non-reinforced pipe is connected to manholes or concrete structures, take connection so that the standard pipe joint is located not more than 3 feet from the outside edge of the structure.
 - 7. When cutting and/or machining the pipe is necessary, use only tools and methods recommended by the pipe manufacturer.

3.3 UNDERGROUND STRUCTURES

- A. Rock Base: Prior to setting pre-cast concrete base section, remove water from the excavation. Place a minimum of 6" of rock base and thoroughly compact with a mechanical vibrating or power tamper.

- B. Structure Joint Seals: Carefully inspect pre-cast structure sections to be joined. Sections with chips or cracks in the tongue shall not be used. Joint seals shall be installed in strict conformance with the manufacturer's recommendations. Only pipe primer furnished by the joint seal manufacturer will be approved.
- C. Pre-cast Concrete Structures: Place pre-cast concrete sections as shown on the drawings. Set top elevation of catch basins as indicated on the drawings. Where manholes occur in pavements, set tops of frames and covers flush with finish surface. Elsewhere, set manhole tops 3 inches above finish surface, unless otherwise indicated.
 - 1. Install frames and covers on top of manholes to positively prevent all infiltration of surface or groundwater into manholes.
 - 2. Frames shall be set in a bed of mortar with the mortar carried over the flange of the ring as shown in the Manhole Details on the drawings.
 - 3. Provide rubber joint gasket complying with ASTM C-443.
 - 4. Apply bituminous mastic coating at joints of sections.
- D. Manhole Invert: Construct manhole inverts in conformance with details shown on the drawings and to ensure an unobstructed flow through manhole. Remove sharp edges or rough sections which tend to obstruct flow. Trowel all mortar surfaces smooth.

3.4 BACKFILLING

- A. General: Conduct backfill operations of open-cut trenches closely following laying, jointing, and bedding of pipe, and after initial inspection and testing are completed. Place backfill and compact in accordance with provisions of Section 31 20 00, Earthwork.

3.5 CLEANING AND TESTING

- A. Prior to final acceptance, the storm sewer system shall be thoroughly cleaned and visually inspected in the presence of the Engineer or his designated representative.
- B. Following visual inspection, leakage testing may be required at the discretion of the Engineer and/or local authorities.
- C. Acceptable methods of testing shall be water or air exfiltration in accordance with the Florida Building Code requirements.
- D. The Contractor shall furnish all necessary tools, supplies, labor, and equipment for testing.
- E. Visual inspection and testing shall be performed on the same day. Notify the Engineer one week in advance.
- F. Contractor shall provide a sealed, certified survey of the as-built layout of the storm system including structure locations, inverts, pipe sizes, locations and inverts and detailed information on the storm water management pond areas.

END OF SECTION 33 41 00

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