

**The Enclosed Document Is Provided For Your Convenience.**

**Please Email ALL Questions:**  
**[MailTo:ContractAdministration@TampaGov.net](mailto:ContractAdministration@TampaGov.net)**

City of Tampa  
Contract Administration Department  
306 E. Jackson St. #280A4N  
Tampa, FL 33602  
(813)274-8456

CITY OF  
TAMPA, FLORIDA

NOTICE TO BIDDERS, INSTRUCTIONS TO BIDDERS  
PROPOSAL, BID BOND, FORM OF NOTICE OF AWARD,  
AGREEMENT, PERFORMANCE BOND AND  
SPECIFICATIONS

FOR

**Contract 20-C-00039**

# **Armenia Avenue at Busch Boulevard Intersection Improvements**

City of Tampa  
CONTRACT ADMINISTRATION DEPARTMENT  
TAMPA MUNICIPAL OFFICE BUILDING  
306 E. JACKSON STREET - 4<sup>TH</sup> FLOOR NORTH  
TAMPA, FLORIDA 33602

OCTOBER 2020

CITY OF TAMPA  
CONTRACT ADMINISTRATION DEPARTMENT  
306 E. Jackson Street 280A4N  
Tampa, FL 33602

\*\*\*\*\*

**BID NOTICE MEMO**

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**Electronic Bids are not allowed for these projects.**

**Physical Bids will be received no later than 1:30 p.m.** at the above address on the indicated Date(s) for the following Project(s):

\*\*\*\*\*

**CONTRACT NO.:** 20-C-00039; Armenia Ave at Busch Blvd Intersection Improvements

**BID OPENING:** 1:30PM, Tuesday, November 17, 2020 **ESTIMATE:** \$2,650,000 **SCOPE:** Work shall include, but not be limited to, maintenance of traffic, roadway construction, signing and pavement markings, signalization, utilities adjustments/relocations and all associated work required for a complete project in accordance with the contract.

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Bids will be opened in the 4th Floor Conference Room, Tampa Municipal Office Building, 306 E. Jackson Street, Tampa, Florida 33602. The public is not allowed to attend in person.

To view the Bid Opening follow these instructions:  
To join the meeting from your computer, tablet or smartphone.

<https://global.gotomeeting.com/join/173279197>

You can also dial in using your phone. (For supported devices, tap a one-touch number below to join instantly.)  
United States: +1 (646) 749-3131 - One-touch: tel:+16467493131,,173279197#

Access Code: 173-279-197

Join from a video-conferencing room or system. Dial in or type: 67.217.95.2 or inroomlink.goto.com  
Meeting ID: 173 279 197 Or dial directly: 173279197@67.217.95.2 or 67.217.95.2##173279197

New to GoToMeeting? Get the app now and be ready when your first meeting starts:

<https://global.gotomeeting.com/install/173279197>

In accordance with the Americans with Disabilities Act ("ADA") and Section 286.26, Florida Statutes, persons with disabilities needing a reasonable accommodation to participate in this public hearing or meeting should contact the City of Tampa's ADA Coordinator at least 48 hours prior to the proceeding. The ADA Coordinator may be contacted by phone at 813-274-3964, email at TampaADA@tampagov.net, or by submitting an ADA - Accommodations Request online form available at <http://www.tampagov.net/ADARequest>.

Please note that the City of Tampa may not be able to accommodate any request received less than 48 hours before the scheduled public hearing or meeting.

Plans and Specifications and Addenda for this work may be examined at, and downloaded from, [www.demandstar.com](http://www.demandstar.com).  
Files are also available at <http://www.tampagov.net/contract-administration/programs/construction-project-bidding>.

**Email Questions to:** [contractadministration@tampagov.net](mailto:contractadministration@tampagov.net) .

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NOTICE TO BIDDERS  
CITY OF TAMPA, FLORIDA  
Contract 20-C-00039; Armenia Avenue at Busch Boulevard Intersection Improvements

Sealed Proposals will be received by the City of Tampa no later than 1:30 P.M., November 17, 2020, in the 4<sup>th</sup> Floor Conference Room, Tampa Municipal Office Building, 306 E. Jackson Street, Tampa, Florida, there to be publicly opened and read aloud.

The proposed work is to include, but not be limited to, maintenance of traffic, roadway construction, signing and pavement markings, signalization, utilities adjustments/relocations with all associated work required for a complete project in accordance with the Contract Documents.

A prime contractor and his team of subcontractors must each be FDOT pre-qualified for their respective specific portion of the work in accordance with Rule Chapter 14-22 on the date of the Bid Opening or provide sufficient evidence of qualifications within ten (10) days thereof. Work classes applicable to this project include 7-Drainage, 10-Flexible Paving, 38- Roadway Signing, 39-Traffic Signals, Pavement Markings, Sidewalks and Grading. All bidders must provide Certification of Current Capacity and Status of Contracts on Hand on the day of Bid Opening.

The Instructions to Bidders, Proposal, Form of Bid Bond, Agreement, Form of Public Construction Bond, Specifications, Plans and other Contract Documents are posted at DemandStar.com. Backup files may be downloaded from <http://www.tampagov.net/contract-administration/programs/construction-project-bidding>. One set may be available for reference at the office of the Contract Administration Department, Municipal Office Building, Fourth Floor North, City Hall Plaza, Tampa, Florida 33602.

Each Proposal must be submitted on the Proposal form included in the Specifications and must be accompanied by a certified check or cashier's check on a solvent bank or trust company in compliance with Section 255.051, Florida Statutes, made payable to the City of Tampa, in an amount of not less than five per cent of the total bid, or a Bid Bond, of like amount, on the form set forth in the Contract Documents, as a guarantee that, if the Proposal is accepted, the Bidder will execute the Proposed Contract and furnish a Public Construction Bond within twenty (20) days after receipt of Notice of Award of Contract.

To be eligible to submit a proposal, a Bidder must hold the required and/or appropriate current license, certificate, or registration (e.g. DBPR license/certificate of authorization, etc.) in good standing at the time of receipt of Bids. **Per Section 489.131, Florida Statutes, Proposals submitted for the construction, improvement, remodeling, or repair of public projects must be accompanied by evidence that the Bidder holds the required and/or appropriate current certificate or registration, unless the work to be performed is exempt under Section 489.103, Florida Statutes.**

The City of Tampa reserves the right to reject any or all Bids and to waive any informalities in the Bid and/or Bid Bond. Acceptance or rejection of Proposals will be made as soon as practicable after the Proposals are received, but the City reserves the right to hold Proposals for ninety (90) days from the date of Opening.

Bid Protest Procedures: Unless subsequently indicated otherwise, in a revised posting on the Department's web page for Construction Project Bidding, the City of Tampa intends to award the referenced project to the lowest bidder listed in the tabulation posted on or about the date of Bid Opening. A bidder aggrieved by this decision may file a protest not later than 4:30 P.M., five (5) business days from the first posting thereof, pursuant to City of Tampa Code Chapter 2, Article V, Division 3, Section 2-282, Procurement Protest Procedures. Protests not conforming therewith shall not be reviewed.

Pursuant to Section 2-282, City of Tampa Code, during the solicitation period, including any protest and/or appeal, NO CONTACT with City officers or employees is permitted from any bidder or proposer, other than as specifically stated in this solicitation and as follows:  
Director of the Contract Administration Department (CAD)  
Contracts Management Supervisor, Jim Greiner  
Contract Officer, Jody Gray  
City legal department

Any Requests For Information must be submitted by email to [ContractAdministration@tampagov.net](mailto:ContractAdministration@tampagov.net)

A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list." Refer to Section 287.133, Florida Statutes.

Pursuant to Section 287.087, Florida Statutes, under certain circumstances preference may be given to businesses with a drug-free workplace program that meets the requirements of said Section.

INSTRUCTIONS TO BIDDERS  
SECTION 1 - SPECIAL INSTRUCTIONS

I-1.01 GENERAL:

The proposed work is the Armenia Avenue at Busch Boulevard Intersection Improvements in the City of Tampa, as required for a complete project, as shown on the plans and detailed in the specifications. The work is located on land owned or controlled by the City of Tampa.

To be eligible to submit a proposal, a Bidder must hold the required and/or appropriate current license, certificate, or registration (e.g. DBPR license/certificate of authorization, etc.) in good standing at the time of receipt of Bids. **Per Section 489.131, Florida Statutes, Proposals submitted for the construction, improvement, remodeling, or repair of public projects must be accompanied by evidence that the Bidder holds the required and/or appropriate current certificate or registration, unless the work to be performed is exempt under Section 489.103, Florida Statutes.**

I-1.02 FORM PREPARATION AND PRESENTATION OF PROPOSALS: Replace the second sentence with the following: Submission of the entire specification book is not required.

I-1.03 ADDENDA – Section I-2.03 is replaced with the following: No interpretation of the meaning of the Plans, Specifications, or other Contract Documents will be made to any Bidder orally.

Every request for such interpretation must be in writing, addressed to the City of Tampa, Contract Administration Department, 306 E. Jackson St., 4th Floor, Tampa, Florida 33602 and then emailed to [ContractAdministration@tampagov.net](mailto:ContractAdministration@tampagov.net). To be given consideration, such request must be received at least seven (7) days prior to the date fixed for the opening of the Proposals. Any and all such interpretations and any supplemental instructions will be in the form of written addenda which, if issued, will be posted on DemandStar.Com and on the Department's web page. Failure of any Bidder to receive any such addenda shall not relieve said Bidder from any obligation under his Proposal as submitted. All addenda so issued shall become part of the Contract Documents.

I-1.04 INSTRUCTIONS TO BIDDERS

**SECTION 2 – GENERAL INSTRUCTIONS.** Section I-2.07 SIGNATURE AND QUALIFICATIONS OF BIDDERS is replaced with the following:

Proposals must be signed in ink by the Bidder with signature in full. When firm is a Bidder, the Proposal shall be signed in the name of the firm by one or more partners. When a corporation is a bidder the officer signing shall set out the corporate name in full beneath which he shall sign his name and give the title of his office.

If the bidder referred to in Section I-2.07 is a corporation, it must submit; upon request, a copy of its filed Articles of Incorporation. In addition, if the bidder was incorporated in another state, it must establish that it is authorized to do business in the State of Florida. If the bidder is using a fictitious name, it must submit upon request, proof of registration of such name with the Clerk of the Circuit Court of the County where its principal place of business is. Failure to submit what is required is grounds to reject the bid of that bidder.

A prime contractor and his team of subcontractors must each be FDOT pre-qualified for their respective specific portion of the work, in accordance with Rule Chapter 14-22 on the date of the Bid Opening or provide sufficient evidence of qualifications within ten (10) days thereof. Work classes applicable to this project include 7-Drainage, 10-Flexible Paving, 38- Roadway Signing, 39-Traffic Signals, Pavement Markings, Sidewalks and Grading. All bidders must provide Certification of Current Capacity and Status of Contracts on Hand on the day of Bid Opening.

**SECTION 2 – GENERAL INSTRUCTIONS.** Section I-2.14 NONDISCRIMINATION IN EMPLOYMENT is changed to add the following to the end of the existing text:

The following provisions are hereby incorporated into any contract executed by or on behalf of the City. Contractor shall comply with the following Statement of Assurance: During the performance of the Contract, the Contractor assures the City, that the Contractor is in compliance with Title VII of the 1964 Civil Rights Act, as amended, the Florida Civil Rights Act of 1992, and the City of Tampa Code of Ordinances, Chapter 12, in that Firm/Contractor does not on the grounds of race, color, national origin, religion, sex, sexual orientation, gender identity or expression, age, disability, familial status, or marital status,

INSTRUCTIONS TO BIDDERS  
SECTION 1 - SPECIAL INSTRUCTIONS

discriminate in any form or manner against said Firm's/Contractor's employees or applicants for employment. Contractor understands and agrees that the Contract is conditioned upon the veracity of this Statement of Assurance, and that violation of this condition shall be considered a material breach of the Award/Contract. Furthermore, Contractor herein assures the City that said Contractor will comply with Title VI of the Civil Rights Act of 1964 when federal grant(s) is/are involved. This Statement of Assurance shall be interpreted to include Vietnam-Era Veterans and Disabled Veterans within its protective range of applicability. Firm/Contractor further acknowledges and agrees to provide the City with all information and documentation that may be requested by the City from time to time regarding the solicitation, selection, treatment and payment of subcontractors, suppliers and vendors in connection with this Award/Contract. Firm/Contractor further acknowledges that it must comply with City of Tampa Code of Ordinances, Chapter 26.5, as enacted by Ordinance No. 2008-89.

I-1.05 TIME FOR COMPLETION:

The work shall be arranged to be completed in accordance with a progress schedule approved by the Construction Engineer.

The time for completion of this project, referred in Article 4.01 of the Agreement, shall be 450 consecutive calendar days. The period for performance shall start from the date indicated in the Notice To Proceed.

Extensions of time are allowable for actions of CSX or its contractors.

I-1.06 LIQUIDATED DAMAGES:

The amount of liquidated damages, referred to in Article 4.06 of the Agreement, for completion of this project shall be \$500 per calendar day.

I-1.07 BASIS OF AWARD OF CONTRACT:

The basis of award referred to in Item I-2.11 of Instructions to Bidders shall be the greatest amount of work, which can be accomplished within the funds available as budgeted. The award may be made on the basis of the total bid, base bid, alternates(s) if any, unit bids if any, or any combination thereof deemed to be in the best interest of the City.

Unless all bids are rejected, the award will be made within 90 days after opening proposals.

I-1.08 GROUND BREAKING CEREMONY:

Arrangement may be made by the City in coordination with the Contractor, for construction to commence with a Ground Breaking Ceremony. Details will be discussed at the pre-construction conference.

I-1.09 INSURANCE:

The insurance required for this project shall be as indicated on the attached and incorporated Special Instructions pages beginning with page INS-1 entitled CITY OF TAMPA INSURANCE REQUIREMENTS, which among other things requires the Contractor to provide a Certificate of Insurance to the City prior to commencing work. The City may from time to time use a third party vendor to manage its insurance certificates and related documentation which vendor may periodically initiate contact, requests for information, etc. on the City's behalf. The Insurance Certificate shall include the Florida Department of Transportation as an Additional Insured to the General Liability policy.

INSTRUCTIONS TO BIDDERS  
SECTION 1 – SPECIAL INSTRUCTIONS

I-1.10 EQUAL BUSINESS OPPORTUNITY PROGRAM (EBO) REQUIREMENTS / PROJECT SUBCONTRACTING GOAL(S)

**BIDDERS MUST SUBMIT COMPLETED AND SIGNED CITY OF TAMPA FORMS MBD-10 AND MBD-20 WITH THEIR BIDS. BIDS SUBMITTED WITHOUT THESE COMPLETED FORMS (INCLUDING SIGNATURES) WILL BE DEEMED NON-RESPONSIVE. INSTRUCTIONS ON COMPLETING THE FORMS ARE INCLUDED AFTER EACH FORM IN THIS BID PACKAGE.**

**THE CHECKED BOX INDICATES SECTION THAT APPLIES TO THIS BID.**



**SUBCONTRACTING GOAL – (WMBE and SLBE)**

In accordance with the City of Tampa's EBO Program, Chapter 26.5, City of Tampa Code, the subcontracting goal(s) has/have been established for subcontracting with City-certified underutilized WMBEs (Women and Minority Business Enterprises) and/or SLBEs (Small Local Business Enterprises) on this project (hereinafter "Goal"). *The Goal is based, in part, upon the availability of City-certified firms to perform the anticipated scope of work (Bid is subject to the subcontracting project goal(s) section for which a corresponding numerical percent is indicated).* Project Industry Category: Construction

- Project Goal(s): \_\_\_\_\_% **U-WMBE (Underutilized Woman and Minority Business Enterprise) (EBO Program)**  
per MBD Form-70 the U-WMBE subcontract Classification for Construction is African American (BBE)
- \_\_\_\_\_% **SLBE (Small Local Business Enterprise) (EBO Program)** only City-certified SLBEs
- 24.0% **U-WMBE/SLBE Combined (EBO Program)**  
per MBD Form-70 the U-WMBE subcontract Classification for Construction is African American (BBE)  
together with City-certified SLBEs
- \_\_\_\_\_% **WMBE/SLBE ASPIRATIONAL (EBO Program)** An all-inclusive SLBE/WMBE goal; any City certified firm counts towards goal attainment.

BIDDERS **MUST SOLICIT ALL COMPANIES ON THE ATTACHED AVAILABILITY CONTACT LIST** at least **five (5) City business days or more prior to bid opening as a first step** to demonstrate Good Faith Efforts to achieve the Goal. Substantive documentation that demonstrates Good Faith Efforts to achieve the Goal **must be submitted with the bid**, including emails, faxes, phone calls, letters, and other communication with City-certified firms. Bidders may explore other potential opportunities for subcontracting by consulting the current directory of all certified firms posted by the City of Tampa at <https://tampa.diversitysoftware.com> as the **Availability Contact List may not be inclusive of all firms that could count toward Goal attainment. However, ONLY SUBCONTRACTING** with those specific WMBEs designated as "underutilized" by Classification in the appropriate industry category (and, if made applicable by being specifically included in the above Goal, SLBEs) will count toward meeting the Goal. Making Good Faith Efforts through these and other means (not pro-forma) is the responsibility of the Bidder. See the attached Good Faith Effort Compliance Plan (GFECP) (MBD Form-50) for specific requirements.

GOOD FAITH EFFORT COMPLIANCE PLAN (GFECP) REQUIRED (MBD FORM-50). When a Goal has been established, the Bidder **must submit** with its bid a Good Faith Effort Compliance Plan (GFECP) using the attached MBD Form-50 together with supporting documentation as specified therein. **Submittals that do not contain MBD Form-50 when a Goal has been established will be deemed non-responsive.** Additional explanation and documentation is required whenever a City-certified subcontractor's quote is not utilized. Any additional information regarding GFECP (post-bid) shall be only upon the City's request for clarification of information submitted with bid and **not to "cure" omissions or deficiencies** of the bid.

**NOTE:** When U-WMBEs are included in a Goal, only those City-certified subcontractors whose WMBE Classification is designated "underutilized" will count toward Goal attainment. Refer to **MBD Form-70** to identify underutilized WMBEs by subcontract Classification for the applicable project industry category. A prime bidder who is a City-certified WMBE and/or SLBE is not exempt from the **GFECP MBD Form-50** requirements.



**SUBCONTRACTING GOAL – (DBE) FDOT DISADVANTAGED BUSINESS ENTERPRISE PROGRAM**

The City of Tampa is required to use the Florida Department of Transportation (FDOT) Disadvantaged Business Enterprise (DBE) program on contracts with Federal Highway Administration (FHWA) funds. Effective October 1, 2017 through to September 30, 2020, the overall FDOT DBE aspirational goal is **10.65%** and is *race neutral*, meaning that FDOT believes the aspirational DBE goal may be achieved entirely through ordinary, competitive procurement methods. Despite the absence of a contract specific DBE goal on this project, the City encourages bidders to seek out and use DBEs and other minority, small businesses. For assistance in identifying certified DBEs, FDOT offers the use of its supportive services program accessed via FDOT's Equal Opportunity Office at <http://www.fdot.gov/equalopportunity/serviceproviders.shtm>. FDOT DBE rules and regulations apply to this solicitation, including the requirement to report bidder opportunity information in the FDOT Equal Opportunity Compliance (EOC) web-based application within three (3) business days of submission of the bid for ALL subcontractors who quoted bidder for this specific project. The five (5) char/digit LAP Agreement Contract Number for this project is G\_\_\_\_\_. The web address to the EOC system is: <https://fdotwp1.dot.state.fl.us/EqualOpportunityCompliance/Account.aspx/LogIn?ReturnUrl=%2fEqualOpportunityCompliance>

**NOTE:** Regardless of FDOT DBE program applicability, for data collection purposes bidder still **must submit** City Forms MBD-10 and MBD-20 **completed and signed** with its bid or the bid will be deemed non-responsive.

**DIVERSITY MANAGEMENT INITIATIVE (DMI) DATA REPORTING FORMS REQUIRED FOR ALL CONTRACTS**

Bidder **must submit**, with its bid, **completed and signed** Forms MBD-10 and MBD-20 to be considered a responsive bid. Specifically, the 'Schedule of All Solicited Sub-(Contractors/Consultants/Suppliers) (Form MBD-10)' listing all subcontractors (including non-certified) solicited and 'Schedule of All -To Be Utilized Sub-(Contractors/Consultants/Suppliers) (Form MBD-20)' listing all subcontractors (including non-certified) to be utilized. Supplemental forms, such as 'Form MBD-40 Official Letter Of Intent' (LOI), can be submitted with the bid or once declared lowest-responsive bidder. After an award, 'DMI Sub-(Contractors/Consultants/Suppliers) Payment Form (Form MBD-30)' is to be submitted with payment requests to report payments to subcontractors and using the on-line automated MBD compliance software system available at <https://tampa.diversitysoftware.com>

**For additional information about the WMBE and SLBE programs contact the Minority and Small Business Development Office at 813-274-5522. (3-18)**

INSTRUCTIONS TO BIDDERS  
SECTION 1 - SPECIAL INSTRUCTIONS

I-1.11 BID SECURITY:

Surety companies shall have a rating of not less than B+ Class VI as evaluated in the most recently circulated Best KeyRating Guide Property/Casualty.

I-1.12 PUBLIC CONSTRUCTION BOND:

The Bidder who is awarded the Contract will be required to furnish a Public Construction Bond upon the form provided herein, equal to 100 percent of the Contract price, such Bond to be issued and executed by (a) surety company(ies) acceptable to the City and licensed to underwrite contracts in the State of Florida. After execution of the Agreement and before commencing work, the Contractor must provide the City a certified copy of the officially recorded Bond.

I-1.13 AGREEMENT

**SECTION 2 – POWERS OF THE CITY’S REPRESENTATIVES**, new Article 2.05:

Add the following:

Article 2.05 CITY’S TERMINATION FOR CONVENIENCE:

The City may, at any time, terminate the Contract in whole or in part for the City’s convenience and without cause. Termination by the City under this Article shall be by a notice of termination delivered to the Contractor, specify the extent of termination and the effective date.

Upon receipt of a notice of termination, the Contractor shall immediately, in accordance with instructions from the City, proceed with performance of the following duties regardless of delay in determining or adjusting amounts due under this Paragraph:

- (a) cease operations as specified in the notice;
- (b) place no further orders and enter into no further subcontracts for materials, labor, services or facilities except as necessary to complete continued portions of the Contract;
- (c) terminate all subcontracts and orders to the extent they relate to the Work terminated;
- (d) proceed to complete the performance of Work not terminated; and
- (e) take actions that may be necessary, or that the City may direct, for the protection and preservation of the terminated Work.

The amount to be paid to the Contractor by the City because of the termination shall consist of:

- (a) for costs related to work performed on the terminated portion of the Work prior to the effective date including termination costs relative to subcontracts that are properly chargeable to the terminated portion of the Work;
- (b) the reasonable costs of settlement of the Work terminated, including accounting, legal, clerical and other expenses reasonable necessary for the preparation of termination settlement proposals and supporting data; additional costs of termination and settlement of subcontracts excluding amounts of such settlements; and storage, transportation, and other costs incurred which are reasonably necessary for the preservation, protection or disposition of the terminated Work; and
- (c) a fair and reasonable profit on the completed Work unless the Contractor would have sustained a loss on the entire Contract had it been completed.

Allowance shall be made for payments previously made to the Contractor for the terminated portion of the Work, and claims which the City has against the Contractor under the Contract, and for the value of materials supplies, equipment or other items that are part of the costs of the Work to be disposed of by the Contractor.

**SECTION 5 – SUBCONTRACTS AND ASSIGNMENTS**, Article 5.01, Page A-7, last paragraph:

Change “...twenty-five (25) percent...” to “...fifty-one (51) percent...”

**SECTION 8 – CONTRACTOR’S EMPLOYEES**, Article 8.03, Page A-9, delete Article 8.03 in its entirety and

Replace with the following new article:

ARTICLE 8.03 EMPLOYMENT OPPORTUNITIES

The Contractor shall, in the performance of the work required to be done under this Contract, employ all workers without discrimination and must not maintain, provide or permit facilities that are segregated.

INSTRUCTIONS TO BIDDERS  
SECTION 1 - SPECIAL INSTRUCTIONS

**SECTION 10 – PAYMENTS**, Article 10.05, Page A-10, 1<sup>st</sup> Paragraph, 1<sup>st</sup> Sentence:

Change "...fair value of the work done, and may apply for..." to "...fair value of the work done, and shall apply for..."

**SECTION 11 – MISCELLANEOUS PROVISIONS**, Article 11.02, Page A-12, 1<sup>st</sup> Paragraph, 2<sup>nd</sup> Sentence:

Delete the 2<sup>nd</sup> Sentence in its entirety and replace it with the following new 2<sup>nd</sup> Sentence:

Without limiting application of Article 11.07, below, whenever the Contractor is required or desires to use any design, device, material, or process covered by letters of patent or copyright, the Contractor shall indemnify, defend, and hold harmless the City Indemnified Parties (as defined below) from any and all Claims (as defined below) for infringement by reason of the use of any such patented design, device, tool, material, equipment, or process, to be performed under the Contract and damages which may be incurred by reason of such infringement at any time during the prosecution or after completion of the work.

**SECTION 11 – MISCELLANEOUS PROVISIONS**, Article 11.03, Page A-12:

Delete Article 11.03 in its entirety and replace with the following new article:

ARTICLE 11.03 INTENTIONALLY OMITTED.

**SECTION 11 – MISCELLANEOUS PROVISIONS**, Article 11.07, Page A-12:

Delete Article 11.07 in its entirety and replace with the following new article:

ARTICLE 11.07 INDEMNIFICATION PROVISIONS

Whenever there appears in this Agreement, or in the other Contact Documents made a part hereof, an indemnification provision within the purview of Chapter 725.06, Laws of Florida, the monetary limitation on the extent of the indemnification under each such provision shall be One Million Dollars or a sum equal to the total Contract price, whichever shall be the greater.

Contractor releases and agrees to defend, indemnify and hold harmless the City, its officers, elected and appointed officials, employees, and/or agents (collectively, "City Indemnified Parties") from and against any and all losses, liabilities, damages, penalties, settlements, judgments, charges, or costs (including without limitation attorneys' fees, professional fees, or other expenses) of every kind and character arising out of any and all claims, liens, is entitled to indemnification hereunder. This obligation shall in no way be limited in any nature whatsoever by any limitation on the amount or type of Contractor's insurance coverage.

The parties agree that to the extent the written terms of this indemnification are deemed by a court of competent jurisdiction to be in conflict with any provisions of Florida law, in particular Sections 725.06 and 725.08, Florida Statutes, the written terms of this indemnification shall be deemed by any court of competent jurisdiction to be modified in such a manner as to be in fully and complete compliance with all such laws and to contain such limiting conditions or limitations of liability, or to not contain any unenforceable or prohibited term or terms, such that this indemnification shall be enforceable in accordance with and to the maximum extent permitted by Florida law.

The obligation of Contractor under this Article is absolute and unconditional; it is not conditioned in any way on any attempt by a City Indemnified Party to collect from an insurer any amount under a liability insurance policy, and is not subject to any set-off, defense, deduction, or counterclaim that the Contractor might have against the City Indemnified Party. The duty to defend hereunder is independent and separate from the duty to indemnify, and the duty to defend exists regardless of any ultimate liability of Contractor, the City, and any City Indemnified Party. The duty to defend arises immediately upon presentation of a Claim by any party and written notice of such Claim being provided to Contractor. Contractor's defense and indemnity obligations hereunder will survive the expiration or earlier termination of this Contract.

Contractor agrees and recognizes that the City Indemnified Parties shall not be held liable or responsible for any Claims which may result from any actions or omissions of Contractor in which the City Indemnified Parties participated either through providing data or advice and/or review or concurrence of Contractor's actions. In

INSTRUCTIONS TO BIDDERS  
SECTION 1 - SPECIAL INSTRUCTIONS

reviewing, approving or rejecting any submissions by Contractor or other acts of Contractor, the City in no way assumes or shares any responsibility or liability of Contractor or any tier of subcontractor/subconsultant/supplier, under this Contract.

In the event the law is construed to require a specific consideration for such indemnification, the parties agree that the sum of Ten Dollars and 00/100 (\$10.00), receipt of which is hereby acknowledged, is the specific consideration for such indemnification and the providing of such indemnification is deemed to be part of the specifications with respect to the services provided by Contractor.

**SECTION 11 – MISCELLANEOUS PROVISIONS**, Article 11.12, Page A-13:  
Change Article 11.12 to add the following new language after existing text:

The City of Tampa is a public agency subject to Chapter 119, Florida Statutes. In accordance with Florida Statutes, 119.0701, Contractor agrees to comply with Florida's Public Records Law, including the following:

1. Contractor shall keep and maintain public records required by the City to perform the services under this Agreement for a period of five (5) years following final payment;
2. Upon request by the City, provide the City with copies of the requested records, having redacted records in total on in part that are exempt from disclosure by law or allow the records to be inspected or copied within a reasonable time (with provision of a copy of such records to the City) on the same terms and conditions that the City would provide the records and at a cost that does not exceed that provided in Chapter 119, Florida Statutes, or as otherwise provided by law;
3. Ensure that records, in part or in total, that are exempt or that are confidential and exempt from disclosure requirements are not disclosed except as authorized by law for the duration of the Agreement term and following completion (or earlier termination) of the Agreement if Contractor does not transfer the records to the City;
4. Upon completion (or earlier termination) of the Agreement, Contractor shall within 30 days after such event either transfer to the City, at no cost, all public records in possession of the Contractor or keep and maintain the public records in compliance with Chapter 119, Florida Statutes. If Contractor transfers all public records to the City upon completion (or earlier termination) of the Agreement, Contractor shall destroy any duplicate records that are exempt or confidential and exempt from public records disclosure requirements. If Contractor keeps and maintains public records upon completion (or earlier termination) of the Agreement, Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City in a format that is compatible with the information technology systems of the agency.

The failure of Contractor to comply with Chapter 119, Florida Statutes, and/or the provisions set forth in this Article shall be grounds for immediate unilateral termination of the Agreement by the City; the City shall also have the option to withhold compensation due Contractor until records are received as provided herein.

**IF CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT 813-274-8598, JIM.GREINER@TAMPAGOV.NET, AND CONTRACT ADMINISTRATION DEPARTMENT, TAMPA MUNICIPAL OFFICE BUILDING, 4TH FLOOR, 306 E. JACKSON ST. TAMPA, FLORIDA 33602.**

- I-1.14 Contractors must utilize the U.S. Department of Homeland Security's E-Verify Systems to verify the employment eligibility of all persons employed during the term of the Contract to perform employment duties within the State of Florida and all persons, including subcontractors, assigned by Contractor to perform work pursuant to the contract.



INSTRUCTIONS TO BIDDERS  
SECTION 1 - SPECIAL INSTRUCTIONS

I-1.15 GENERAL PROVISIONS; G-2.02 Copies Furnished to Contractor: Replace the first paragraph with the following:

The Contractor shall acquire for its use copies of the plans and specifications as needed, which may be downloaded from the City's web site, at <http://www.tampagov.net/contract-administration/programs/construction-project-bidding>.

Bidder as part of the solicitation process (and as Contractor if Bidder is successful) may hold, come into possession of, and/or generate certain building plans, blueprints, schematic drawings, including draft, preliminary, and final formats, which depict the internal layout and structural elements of a building, facility, or other structure owned or operated by the City or an agency (singularly or collectively "Exempt Plans"), which pursuant to Section 119.071(3), Florida Statutes, are exempt from Section 119.07(1), Florida Statutes and Section 24(a), Art. I of the Florida State Constitution. Contractor certifies it has read and is familiar the exemptions and obligations of Section 119.071(3), Florida Statutes; further that Contractor is and shall remain in compliance with same, including without limitation maintaining the exempt status of such Exempt Plans, for so long as any Exempt Plans are held by or otherwise in its possession.

I-1.16 PAYMENT DISPUTE RESOLUTION

Any dispute pertaining to pay requests must be presented to the City pursuant to Executive Order 2003-1.

I-1.17 SCRUTINIZED COMPANIES CERTIFICATION

Section 287.135, Florida Statutes, prohibits agencies or local governmental entities from contracting for goods or services of any amount with companies that are on the Scrutinized Companies that Boycott Israel List or are engaged in a boycott of Israel, and of \$1 million or more with companies that are on either the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or are engaged in business operations in Cuba or Syria. Specifically, Section 287.135(2), Florida Statutes, states: "A company is ineligible to, and may not, bid on, submit a proposal for, or enter into or renew a contract with an agency or local governmental entity for goods or services of: (a) Any amount if, at the time of bidding on, submitting a proposal for, or entering into or renewing such contract, the company is on the Scrutinized Companies that Boycott Israel List, created pursuant to s. 215.4725, or is engaged in a boycott of Israel; or (b) One million dollars or more if, at the time of bidding on, submitting a proposal for, or entering into or renewing such contract, the company: 1. Is on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, created pursuant to s. 215.473; or 2. Is engaged in business operations in Cuba or Syria."

Upon submitting its bid or proposal, a bidder/proposer: (i) certifies the company is not in violation of Section 287.135, Florida Statutes, and shall not be in violation at the time the company enters into or renews any resulting contract; and (ii) agrees any such resulting contract shall be deemed to contain a provision that allows the City, at its option, to terminate such contract for cause if the company is found to have submitted a false certification, been placed on one or any of the foregoing Lists, been engaged in a boycott of Israel, or been engaged in business operations in Cuba or Syria.

I-1.18 FLORIDA'S PUBLIC RECORDS LAW; DATA COLLECTION

Pursuant to Section 119.071(5)(a)2a, Florida Statutes, social security numbers shall only be collected from Bidders and/or Contractor by the City should such number be needed for identification, verification, and/or tax reporting purposes. To the extent Bidder and/or Contractor collects an individual's social security number in the course of acting on behalf of the City pursuant to the terms and conditions of its Proposal or, if awarded, the Agreement, Bidder and/or Contractor shall follow the requirements of Florida's Public Records Law.



INSTRUCTIONS TO BIDDERS  
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Pursuant to Section 119.071(5)(a)2a, Florida Statutes, social security numbers shall only be collected from Bidders and/or Contractor by the City should such number be needed for identification, verification, and/or tax reporting purposes. To the extent Bidder and/or Contractor collects an individual's social security number in the course of acting on behalf of the City pursuant to the terms and conditions of its Proposal or, if awarded, the Agreement, Bidder and/or Contractor shall follow the requirements of Florida's Public Records Law.

I-1.19 INDEMNIFICATION

To the extent provided by law, the Contractor shall indemnify, defend, and hold harmless the City and the State of Florida, Department of Transportation, including the Department's officers, agents, and employees, against any actions, claims, or damages arising out of, relating to, or resulting from negligent or wrongful act(s) of the Contractor, or any of its officers, agents, or employees, acting within the scope of their office or employment, in connection with the rights granted to or exercised by the Contractor hereunder, to the extent and within the limitations of Section 768.28, Florida Statutes.

The foregoing indemnification shall not constitute a waiver of sovereign immunity beyond the limits set forth in Florida Statutes, Section 768.28. Nor shall the same be construed to constitute agreement by the Contractor to indemnify the City for the negligent acts or omissions of the City, its officers, agents, or employees, or third parties. Nor shall the same be construed to constitute agreement by the Contractor to indemnify the Department for the negligent acts or omissions of the Department, its officers, agents, or employees, or third parties. This indemnification shall survive the termination of this Agreement.

I-1.20 s.20.055(5) FLORIDA STATUTES

It is the duty of every state officer, employee, agency, special district, board, commission, contractor, and subcontractor to cooperate with the inspector general in any investigation, audit, inspection, review, or hearing pursuant to this section.

# INSTRUCTIONS TO BIDDERS

## SECTION 2 GENERAL INSTRUCTIONS

### I-2.01 BIDDER'S RESPONSIBILITY

Before submitting Proposals, Bidders shall carefully examine the entire site of the proposed work and adjacent premises and the various means of approach and access to the site, and make all necessary investigations to inform themselves thoroughly as to the facilities necessary for delivering, placing and operating the necessary construction equipment, and for delivering and handling materials at the site, and inform themselves thoroughly as to all difficulties involved in the completion of all the work in accordance with the Contract Documents.

Bidders must examine the Plans, Specifications, and other Contract Documents and shall exercise their own judgment as to the nature and amount of the whole of the work to be done, and for the bid prices must assume all risk of variance, by whomsoever made, in any computation or statement of amounts or quantities necessary to complete the work in strict compliance with the Contract Documents.

Elevations of the ground are shown on the Plans and are believed to be reasonably correct, but are not guaranteed to be absolutely so and are presented only as an approximation. Bidders shall satisfy themselves as to the correctness of all elevations.

The City may have acquired, for its own use, certain information relating to the character of materials, earth formations, probable profiles of the ground, conditions below ground, and water surfaces to be encountered at the site of the proposed work. This information, if it exists, is on file at the offices of the Department of Public Works and Bidders will be permitted to see and examine this information for whatever value they consider it worth. However, this information is not guaranteed, and Bidders should satisfy themselves by making borings or test pits, or by such other methods as they may prefer, as to the character, location, and amounts of water, peat, clay, sand, quicksand, gravel, boulders, conglomerate, rock, gas or other material to be encountered or work to be performed.

Various underground and overhead structures and utilities are shown on the plans. The location and dimensions of such structures and utilities, where given, are believed to be reasonably correct, but do not purport to be absolutely so. These structures and utilities are plotted on the Plans for the information of the Bidders, but information so given is not to be construed as a representation or assurance that such structures will be found or encountered as plotted, or that such information is complete or accurate.

### I-2.02 FORM, PREPARATION AND PRESENTATION OF PROPOSALS

Each Proposal shall be submitted upon the Proposal Form and in accordance with the instructions included herein. The Proposal Form must not be detached herefrom. All blank spaces for bid prices must be filled in, in both words and figures, with the unit or lump sum prices, or both, for which the Proposal is made. The computed total price for each unit price Contract Item shall be determined by multiplying the estimated quantity of the item, as set forth in the Proposal Form, by the corresponding unit price bid for such item. The resulting product shall be entered in the appropriate blank space under the column headed "Computed Total Price for Item". The lump sum price bid for each lump sum price Contract Item shall also be entered in the column headed "Computed Total Price for Item". If a Proposal contains any omissions, erasures, alterations, additions, or items not called for in the itemized Proposal, or contains irregularities of any kind, such may constitute sufficient cause for rejection of the Proposal. In case of any discrepancy in the unit price or amount bid for any item in the Proposal, the price as expressed in written words will govern. In no case is the Agreement Form to be filled out or signed by the Bidder.

In the case of certain jobs bid Lump Sum a "Schedule of Unit Prices" must be filled out as an attachment to the Lump Sum proposal. These prices may be used as a guide for the negotiation of change orders, at the City's option.

The proposal must be signed and certified and be presented on the prescribed form in a sealed envelope on/or before the time and at the place stated in the Notice of Bidders, endorsed with the name of the person, firm or corporation presenting it, the date of presentation, and the title of the work for which the Proposal is made.

Unless the apparent low bidder is now engaged in or has recently completed contract work for the City of Tampa, he, if requested, shall furnish to the City, after the opening of bids and prior to award, a summary statement of record of construction experience over the past three (3) years with proper supporting evidence, and, if required by the City, shall also furnish a list of equipment and other facilities pertinent to and available for the proper execution of the proposed work, and a statement of financial resources to the extent necessary to establish ability to carry on the proposed work. The City may make further investigations as considered necessary with respect to responsibility of the Bidder to whom it appears may be awarded the Contract.

If forwarded by mail, the sealed envelope containing the Proposal, endorsed as directed above, must be enclosed in another envelope addressed as specified in the Notice to Bidders and sent by registered mail.

### I-2.03 ADDENDA AND INTERPRETATIONS

No interpretation of the meaning of the Plans, Specifications, or other Contract Documents will be made to any Bidder orally.

Every request for such interpretation must be in writing, addressed to the Contract Administration Department, Tampa Municipal Office Building, 4th Floor North, City Hall Plaza, Tampa, Florida 33602. To be given consideration, such request must be received at least seven (7) days prior to the date fixed for the opening of the Proposals. Any and all such interpretations and any supplemental instructions will be in the form of written addenda which, if issued, will be sent by certified mail, with return receipt requested, to all prospective bidders at the respective addresses furnished, for such purposes, not later than three (3) working days prior to the date fixed for the opening of the Proposals, and if requested, a copy will be delivered to the prospective bidder's representative. Failure of any Bidder to receive any such addenda shall not relieve said Bidder from any obligation under his Proposal as submitted. All addenda so issued shall become part of the Contract Documents.

### I-2.04 BID SECURITY

Each Proposal must be accompanied by a certified or cashier's check issued by a solvent bank or trust company and payable at sight to the City of Tampa, in compliance with Section 255.051 Florida Statutes, or a Bid Bond upon the form provided herein, in an amount of not less than five percent of the sum of the computed total amount of the Bidder's Proposal as a guarantee that if the Proposal is accepted, the Bidder will execute and fill in the proposed Contract and Public Construction Bond within twenty (20) days after notice of award of the Contract. Certified checks shall have all necessary documentary revenue stamps attached if required by law. Surety on Bid Bonds shall be a duly authorized surety company authorized to do business in the State of Florida, and all such Bonds shall be issued or countersigned by a local resident producing agent, and satisfactory evidence of the authority of the person or persons executing such Bond to Execute the same shall be submitted with the Bond. Bid Bonds shall be issued by a surety company acceptable to the City.

Within ten (10) days after the opening of Proposals, the bid security of all but the three lowest Bidders will be returned. The bid security of the remaining two Bidders whose Proposals are not accepted will be

returned within ten (10) days after the execution of the Contract, or, if no such Contract has been executed, within ninety (90) days after the date of opening Proposals. The bid security of the Bidder whose Proposal is accepted will be returned only after he has duly executed the Contract and furnished the required Public Construction Bond and insurance.

Should it be necessary for the City to retain the bid security and said bid security is in the form of checks, the checks of these Bidders will be returned if replaced by Bid Bonds in an amount equal to the amount of the checks of such Bidders in such form and issued by a surety company acceptable to the City.

A Bidder may withdraw his Proposal before the time fixed for the opening of Proposals, without prejudice to himself, by communicating his purpose, in writing, to the Mayor and City Council, and when his communication is received, the Proposal will be handed to him or his authorized agent unopened. No Bidder may withdraw his Proposal within ninety (90) days after the day of opening Proposals.

The Bidder whose Proposal is accepted shall enter into a written contract, upon the Agreement form included herein, for the performance of the work and furnish the required Public Construction Bond within twenty (20) days after written notice by the City of Award of Contract has been served on such Bidder personally or after receipt of the written notice by registered mail to such Bidder at the address given in his Proposal.

If the Bidder to whom a Contract is awarded refuses or neglects to execute it or fails to furnish the required Public Construction Bond within twenty (20) days after receipt by him of the Notice of Award of Contract, the amount of his bid security shall be forfeited and shall be retained by the City as liquidated damages, and not as a penalty, it being now agreed that said sum is a fair estimate of the amount of damages that the City will sustain in case said Bidder fails to enter into a Contract and furnish the required Public Construction Bond. If a Bid Bond was furnished, the full amount of the Bond shall become due and payable as liquidated damages caused by such failure. The full amount of the bid security shall be forfeited as liquidated damages without consideration of the fact that an award may be less than the full amount of the Bidder's Proposal, excepting that the award shall be within the conditions of said Proposal relating to the basis of consideration for an award. No plea of mistake in the bid or misunderstanding of the conditions of forfeiture shall be available to the Bidder for the recovery of his deposit or as a defense to any action based upon the neglect or refusal to execute a contract.

#### I-2.05 LAWS AND REGULATIONS

The Bidder who is awarded the Contract must comply with all laws of the State of Florida, and all applicable Ordinances of the City of Tampa respecting labor and compensation and with all other statutes, ordinances, rules and regulations applicable and having the force of law.

#### I-2.06 PUBLIC CONSTRUCTION BOND

The Bidder who is awarded the Contract will be required to furnish a Public Construction Bond upon the form provided herein, equal to 100 percent of the Contract price, such Bond to be executed by a surety company acceptable to the City of Tampa and licensed to underwrite contracts in the State of Florida. Surety companies shall have a rating of not less than: B+ Class VI as evaluated in the most recently circulated BEST'S KEY RATING GUIDE PROPERTY-LIABILITY.

#### I-2.07 SIGNATURE AND QUALIFICATIONS OF BIDDERS

Proposals must be signed in ink by the Bidder with signature in full. When a firm is a Bidder, the Proposal shall be signed in the name of the firm by one or more of the partners. When a corporation is a Bidder the officer signing shall set out the corporate name in full beneath which he shall sign his name and give the title of his office. The Proposal shall also bear the seal of the corporation attested by its secretary. Anyone signing the Proposal as agent must file with it legal evidence of his authority to do so.

Bidders who are nonresident corporations shall furnish to the City a

duly certified copy of their permit to transact business in the State of Florida, signed by the Secretary of State, within ten days of the notice to do so. Such notice will be given to Bidders who are nonresident corporations, to whom it appears an award will be made, and the copy of the permit must be filed with the City before the award will be made. Failure to promptly submit this evidence of qualification to do business in the State of Florida may be basis for rejection of the Proposal.

#### I-2.08 REJECTION OF PROPOSALS

The City reserves the right to reject any Proposal if investigation of the Bidder fails to satisfy the City that such Bidder is properly qualified to carry out the obligations and to complete the work contemplated therein. Any or all Proposals will be rejected if there is reason to believe that collusion exists among Bidders. Proposals will be considered irregular and may be rejected if they show serious omissions, alterations in form, additions not called for, conditions or unauthorized alternates, or irregularities of any kind. The City reserves the right to reject any or all Proposals and to waive such technical errors as may be deemed best for the interests of the City.

#### I-2.09 QUANTITIES ESTIMATED ONLY

The estimate of quantities of the various items of work and materials, if set forth in the Proposal Form, is approximate only and is given solely to be used as a uniform basis for the comparison of Proposals.

The quantities actually required to complete the Contract work may be less or more than so estimated, and if awarded a Contract for the work specified, the Contractor agrees that he will not make any claim for damages or for loss of profits because of a difference between the quantities of the various classes of work assumed for comparison of Proposals and quantities of work actually performed. The City further reserves the right to vary the quantities in any amount.

#### I-2.10 COMPARISON OF PROPOSALS

Except jobs bid on a "One Lump Sum" basis, proposals will be compared on the basis of a total computed price arrived at by taking the sum of the estimated quantity of each item and the corresponding unit price of each item, and including any lump sum prices on individual items.

The computed total prices for individual Contract Items and the total computed price for the entire Contract, as entered by the Bidder in the Proposal Form, are for convenience only and are subject to correction in the tabulation and computation of the Proposals.

#### I-2.11 BASIS OF AWARD

The Contract will be awarded, if at all, to the lowest responsible Bidder or Bidders, as determined by the City and by the terms and conditions of the Contract Documents. Unless all bids are rejected, the award will be made within ninety (90) days after the opening of Proposals. The successful Bidder will be required to possess, or obtain, a valid City Occupational License.

#### I-2.12 INSURANCE REQUIRED

The successful Bidder and his subcontractors will be required to procure and pay for insurance covering the work in accordance with the provisions of Article 6.02 of the Agreement as indicated on special instructions pages beginning with INS-1.

#### I-2.13 NO ASSIGNMENT OF BID

No Bidder shall assign his bid or any rights thereunder.

#### I-2.14 NONDISCRIMINATION IN EMPLOYMENT

Contracts for work under this Proposal will obligate the contractors and subcontractors not to discriminate in employment practices.

Bidders must, if requested, submit with their initial bid a signed statement as to whether they have previously performed work subject to the President's Executive Order Nos. 11246 and 11375.

Bidders must, if requested, submit a compliance report concerning their employment practices and policies in order to maintain their eligibility to receive the award of the Contract.

Successful Bidders must, if requested, submit a list of all subcontractors who will perform work on the project and written,

signed statement from authorized agents of the labor pools with which they will or may deal for employees on the work together with supporting information to the effect that said labor pools practices and policies are in conformity with Executive Order No. 11246 and that said labor pools will affirmatively cooperate in or offer no hindrance to the recruitment, employment and equal treatment of employees seeking employment and performing work under the Contract, or a certification as to what efforts have been made to secure such statements when such agents or labor pools have failed or refused to furnish them prior to the award of the Contract.

#### I-2.15 LABOR STANDARDS

The Bidder's attention is directed to the Contract Provisions of the Labor Standards for federally assisted projects which may be attached to and made a part of the Agreement.

#### I-2.16 NOTICE TO LABOR UNIONS

If applicable, the successful Bidder will be required to provide Labor Unions and other organizations of workers a completed copy of the form entitled "Notice to Labor Unions or Other Organizations of Workers", and such form may be made a part of the Agreement.

#### I-2.17 NOTICE TO PROSPECTIVE FEDERALLY-ASSISTED CONSTRUCTION CONTRACTORS

A Certification of Nonsegregated Facilities, as required by the May 9, 1967, Order (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities, by the Secretary of Labor, must be submitted to said Secretary prior to the award of a federally-assisted construction and Contract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity Clause. The form of certification may be bound herein following the form of Bid Bond.

Contractors receiving federally-assisted construction Contract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause will be required to provide for the forwarding of the following notice to prospective subcontractor for supplies and construction contracts where the subcontracts exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity Clause:

#### NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT FOR CERTIFICATIONS OF NONSEGREGATED FACILITIES

"A Certification of Nonsegregated Facilities, as required by the May 9, 1967, Order (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities, by the Secretary of Labor, must be submitted prior to the award of a subcontract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity Clause."

"Contractors receiving subcontract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause will be required to provide from the forwarding of this notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity Clause."

The United States requires a pre-award conference if a proposed construction contract exceeds one million dollars to determine if the the prospective contractor is in compliance with the Equal Employment Opportunity requirements of Executive Order 11246 of September 24, 1965. In such instances, a meeting may be scheduled at which the prospective contractor must specify what affirmative action he has taken or proposed to take to assure equal employment opportunity which must be approved by the United States before award of the contract will be authorized.

Bidders must be prepared to submit an Equal Employment Opportunity (EEO) plan at a pre-award conference. The plan must include bidding opportunities offered by the Bidder to minority subcontractors.

On October 13, 1971, President Nixon issued Executive Order 11246 emphasizing the government's commitment to the promotion of minority business enterprise. Accordingly, the United States is firmly

committed to the utilization of available resources to support this important program. U.S. agencies are most interested in realizing minority participation on the subject. Achieving equal employment opportunity compliance is required through Executive Order 11246. WE cannot emphasize too strongly that minority subcontractors be extended subcontractors bidding opportunities as but one step in your affirmative action policy.

Due to the importance of this contract, U.S. Agencies may conduct an EEO Conference prior to the award of the Contract. It is suggested that the responsive Bidder confirm the minority subcontractors he contacted for bids or quotations in his EEO plan submitted at the conference.

#### I-2.18 EEO AFFIRMATIVE ACTION REQUIREMENTS

By the submission of a Proposal, each Bidder acknowledges that he understands and will agree to be bound by the equal opportunity requirements of Federal regulations which shall be applicable throughout the performance of work under any contract awarded pursuant to solicitation. Each Bidder agrees that if awarded a contract, he will similarly bind contractually each subcontractor. In policies, each Bidder further understands and agrees that if awarded a contract, he must engage in Affirmative Action directed to promoting and ensuring equal employment opportunity in the work force used under the contract (and he must require contractually the same effort of all subcontractors whose subcontracts exceed \$100,000). The Bidder understands and agrees that "Affirmative Action" as used herein shall constitute a good faith effort to achieve and maintain minority employment in each trade in the on-site work force used on the project. \*\*\*\*\* END of SECTION \*\*\*\*\*

# CITY OF TAMPA INSURANCE REQUIREMENTS

Prior to commencing any work or services or taking occupancy under that certain written agreement or award (for purposes of this document, Agreement) between the City of Tampa, Florida (City) and Firm/Awardee/Contractor/Consultant/Lessee/non-City party, etc. (for purposes of this document, Firm) to which this document is attached and incorporated as an Exhibit or otherwise, and continuing during the term of said Agreement (or longer if the Agreement and/or this document so requires), Firm shall provide, pay for, and maintain insurance against claims for injuries to persons (including death) or damages to property which may arise from or in connection with the performance of the Agreement (including without limitation occupancy and/or use of certain property/premises) by Firm, its agents, representatives, employees, suppliers, subtenants, or subcontractors (which term includes sub-consultants, as applicable) of any tier subject to the terms and conditions of this document. Firm's maintenance of insurance coverage as required herein is a material element of the Agreement and the failure to maintain or renew coverage or provide evidence of same (defined to include without limitation Firm's affirmative duty to provide from time to time upon City's request certificates of insurance, complete and certified copies of Firm's insurance policies, forms, and endorsements, information on the amount of claims payments or reserves chargeable to the aggregate amount of coverage(s) whether during the term of the Agreement or after as may be requested by the City in response to an issue or potential claim arising out of or related to the Agreement to which Firm's insurance obligations hereunder may apply or possibly help mitigate) may be treated as a material breach of the Agreement. Should at any time Firm not maintain the insurance coverages required, City at its sole option (but without any obligation or waiver of its rights) may (i) terminate the Agreement or (ii) purchase such coverages as City deems necessary to protect itself (charging Firm for same) and at City's option suspending Firm's performance until such coverage is in place. If Firm does not reimburse City for such costs within 10 days after demand, in addition to any other rights, City shall also have the right to offset such costs from amounts due Firm under any agreement with the City. All provisions intended to survive or to be performed subsequent to the expiration or termination of the Agreement shall survive, including without limitation Firm's obligation to maintain or renew coverage, provide evidence of coverage and certified copies of policies, etc. upon City's request and/or in response to a potential claim, litigation, etc.

The City reserves the right from time to time to modify or waive any or all of these insurance requirements (or to reject policies) based on the specific nature of goods/services to be provided, nature of the risk, prior experience, insurer, coverage, financial condition, failure to operate legally, or other special circumstances. If Firm maintains broader coverage and/or higher limits than the minimums shown herein, the City requires and shall be entitled to such broader coverage and/or higher limits maintained by Firm. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City. No representation is made that the minimum insurance requirements are sufficient to cover Firm's interests, liabilities, or obligations. Required insurance shall not limit Firm's liability.

Firm acknowledges and agrees Firm and not the City is the party in the best position to determine applicability (e.g. "IF APPLICABLE"), confirm, and/or verify its insurance coverage. Acceptance by the City, or by any of its employees, representatives, agents, etc. of certificates or other documentation of insurance or policies pursuant to the terms of this document and the Agreement evidencing insurance coverages and limits does not constitute approval or agreement that the insurance requirements have been met or that coverages or policies are in compliance. Furthermore, receipt, acceptance, and/or approval of certificates or other documentation of insurance or policies or copies of policies by the City, or by any of its employees, representatives, agents, etc., which indicate less coverage than required does not constitute a waiver of Firm's obligation to fulfill these insurance requirements.

## MINIMUM SCOPE AND LIMIT OF INSURANCE <sup>1</sup>

A. Commercial General Liability (CGL) Insurance on the most current Insurance Services Office (ISO) Form CG 00 01 or its equivalent on an "occurrence" basis (Modified Occurrence or Claims Made forms are not acceptable without prior written consent of the City). Coverage must be provided to cover liability contemplated by the Agreement including without limitation premises and operations, independent contractors, contractual liability, products and completed operations, property damage, bodily, personal and advertising injury, contractual liability, explosion, collapse, underground coverages, personal injury liability, death, employees-as-insureds. Products and completed operations liability coverage maintained for at least 3 years after completion of work. Limits shall not be less than \$1M per occurrence and \$2M general aggregate for Agreements valued at \$2M or less; if valued over \$2M, a general aggregate limit that equals or exceeds the Agreement's value. If a general aggregate limit applies; it shall apply separately to the project/location (ISO CG 2S 03 or 2S 04 or equivalent). **(ALWAYS APPLICABLE)**

B. Automobile Liability (AL) Insurance in accordance with Florida law, as to the ownership, maintenance, and use of all owned, non-owned, leased, or hired vehicles. AL insurance shall not be less than: (a) \$500,000 combined single limit each occurrence bodily injury and property damage for Agreements valued at \$100,000 or less or (b) \$1M combined single limit each occurrence bodily injury and property damage for Agreements valued over \$100,000. If transportation of hazardous material involved, the MCS-90 endorsement (or equivalent). **(ALWAYS APPLICABLE)**

C. Worker's Compensation (WC) & Employer's Liability Insurance for all employees engaged under the Agreement, Worker's Compensation as required by Florida law. Employer's Liability with minimum limits of (a) \$500,000 bodily injury by accident and each accident, bodily injury by disease policy limit, and bodily injury by disease each employee for Agreements valued at \$100,000 and under or (b) \$1M bodily injury by accident and each accident, bodily injury by disease policy limit, and bodily injury by disease each for all other Agreements. **(ALWAYS APPLICABLE)**

D. Excess (Umbrella) Liability Insurance for Agreements valued at \$2M or more, at least \$4M per occurrence in excess of underlying limits and no more restrictive than underlying coverage for all work performed by Firm. May also compensate for a deficiency in CGL, AL, or WC. **(ALWAYS APPLICABLE)**

E. Builder's Risk Insurance for property loss exposure associated with construction/renovation/additions to buildings or structures, including materials or fixtures to be incorporated. Must be "All Risk" form with limits of no less than the project's completed value, have no coinsurance penalties, eliminate the "occupancy clause", cover Firm (together with its contractors, subcontractors of every tier, and suppliers), and name City as a Loss Payee. **(IF APPLICABLE)**

F. Installation Floater coverage for property (usually highly valued equipment or materials such as compressors, generators, etc.) during its installation. Coverage must be "All Risk" including installation and transit for no less than 100% of the installed replacement cost value. **(IF APPLICABLE)**

G. Architects & Engineers Liability/ Professional Liability (E&O)/ Contractors Professional Liability (CPL)/ Medical Malpractice Insurance where Agreement involves Florida-regulated professional services (e.g. architect, engineer, design-builder, CM, accountant, appraiser, investment banker medical professional) at any tier, whether employed or independent, vicarious design liability exposure (e.g. construction means & methods, design supervision), value engineering, constructability assessments/reviews, BIM process, and/or performance specifications. Limits of at least \$1M per occurrence and \$2M aggregate; deletion of design/ build liability exclusions, as applicable, and maintained for at least 3 years after completion of work/services and City's acceptance of same. **(IF APPLICABLE)**

H. Railroad Protective Liability CRPL Insurance for construction within 50ft of operated railroad track(s) or where affects any railroad bridge, trestle, tunnel, track(s) roadbed, or over/under pass. Subject to involved rail road's approval prior to commencement of work. **(IF APPLICABLE)**.

I. Pollution and/or Asbestos Legal Liability Insurance where Agreement involves asbestos and/or environmental hazards/contamination risks (defined broadly, e.g. lead, mold, bacteria, fuel storage, underground work, cleanup (owned or non-owned sites), pollutant generation/transportation, marine/natural resource damage, contamination claim, restitution, business interruption, mold, fungus, lead-based paint, 3rd party claims/removal, etc.), with limits of at least \$1M per occurrence and \$2M aggregate, maintained for at least 3 years after Agreement completion. **(IF APPLICABLE)**

J. Cyber Liability Insurance where Agreement involves portals allowing access to obtain, use, or store data; managed dedicated servers; cloud hosting services; software/hardware; programming; and/or other IT services

<sup>1</sup> "M" indicates million(s), for example \$1M is \$1,000,000

and products are involved. Limits of not less than \$2M per occurrence and \$2M aggregate. Coverage sufficiently broad to respond to duties and obligations undertaken by Firm, and shall include, but not be limited to, claims involving infringement of intellectual property/copyright, trademark, trade dress, invasion of privacy violations, damage to or destruction of electronic information, information theft, release of confidential and/or private information, alteration of electronic information, extortion, virus transmission, and network security. Coverage, as applicable and with sufficient limits to respond, for breach response costs, regulatory fines and penalties, credit monitoring expenses. **(IF APPLICABLE)**

K. Drone/UAV Liability Insurance where Agreements involves unmanned aerial vehicles/drones. Coverage to include products and completed operations, property damage, bodily injury with limits no less than \$1M per occurrence, and \$2M aggregate; may be provided by CGL endorsement subject to City's prior written approval. **(IF APPLICABLE)**

L. Longshore & Harbor Workers' Compensation Act/Jones Act for work being conducted near, above, or on "navigable waters" for not less than the above Employer's Liability Insurance limit. **(IF APPLICABLE)**

M. Garagekeeper/Hangerkeeper/Marina Operator Legal Liability Insurance and/or Hull/P&I Insurance where parking lot, valet, dealership, garage services, towing, etc. and/or operation of a hangar, marina, or air

plane/ship repairer, providing safe berth, air/watercraft storage/docking (on land/ in water), fueling, tours, charters, ferries, dredges, tugs, mooring, towing, boat/aircraft equipment/repair/alteration/maintenance, etc.; cover- age against liability for damage to vehicles air/watercraft, their machinery in Firm's care, custody, or control both private & commercial. Limits at least equal to greater of \$1M, value of max number of vehicles that may be in Firm's custody, or of most costly object in Firm's custody. **(IF APPLICABLE)**

N. Property Insurance and Interruption of Business CIOB) Insurance where premises, building, structure, or improved real property is leased, licensed, or otherwise occupied by Firm. Property Insurance against all risks of loss to any occupant/tenant improvements at full replacement cost with no coinsurance penalty, including fire, water, leak damage, and flood, as applicable, vandalism and malicious mischief endorsements. IOB by which minimum monthly rent will be paid to City for up to 1 year if premises are destroyed, rendered inaccessible or untenable, including disruption of utilities, water, or telecommunications. **(IF APPLICABLE)**

O. Liquor Liability/Host Liquor Liability where Firm directly or indirectly provides alcoholic beverages, limits of at least \$1M per occurrence and \$1M aggregate. **(IF APPLICABLE)**

P. Educators Legal Liability Insurance where day care, after school program, recreational activities, etc. limits per G above. **(IF APPLICABLE)**

### ADDITIONAL REQUIREMENTS

ACCEPTABILITY OF INSURERS- Insurance is to be placed with insurers admitted in the State of Florida and who have a current A.M. Best rating of no less than **A-:VII** or, if not rated by A.M. Best, as otherwise approved by the City in advance and in writing.

ADDITIONAL INSURED - **City, its elected officials, departments, officers, officials, employees, and volunteers together with, as applicable, any associated lender of the City shall be covered as additional insureds on all liability coverage** (e.g. CGL, AL, and Excess (Umbrella) Liability) as to liability arising out of work or operations performed by or on behalf of Firm including materials, parts, or equipment furnished in connection with such work or operations and automobiles owned, leased, hired, or borrowed by or on behalf of Firm. Coverage can be provided in the form of an endorsement to Firm's insurance (at least as broad as ISO Form CG 20 10 11 85 or **both** CG 10 20, CG 20 26, CG 20 33, or CG 20 38 **and** CG 20 37 if later revisions used).

CANCELLATION/NON-RENEWAL – Each insurance policy shall provide that at least 30 days written notice must be given to City of any cancellation, intent to non-renew, or material reduction in coverage (except aggregate liability limits) and at least 10 days' notice for non-payment of premium. Firm shall also have an independent duty to notify City in like manner, within 5 business days of Firm's receipt from its insurer of any notices of same. If any policy's aggregate limit is reduced, Firm shall directly take steps to have it reinstated. Notice and proof of renewal/continued coverage/certifications, etc. shall be sent to the City's notice (or Award contact) address as stated in the Agreement with a copy to the following:

- Contract Administration Department, 306 E Jackson St, Tampa, FL 33602     Purchasing Department, 306 E Jackson Street, Tampa, FL 33602  
 Other: \_\_\_\_\_

CERTIFICATE OF INSURANCE (COI) – to be provided to City by insurance carrier prior to Firm beginning any work/services or taking occupancy and, if the insurance expires prior to completion of the work or services or Agreement term (as may be extended), a renewal COI at least 30 days before expiration to the above address(es). COIs shall specifically identify the Agreement and its subject (project, lease, etc.), shall be sufficiently comprehensive to insure City (named as additional insured) and Firm and to certify that coverage extends to subcontractors' acts or omissions, and as to permit the City to determine the required coverages are in place without the responsibility of examining individual policies. **Certificate Holder must be The City of Tampa, Florida.**

CLAIMS MADE – If any liability insurance is issued on a claims made form, Firm agrees to maintain such coverage uninterrupted for at least 3 years following completion and acceptance of the work either through purchase of an extended reporting provision or purchase of successive renewals. The Retroactive Date must be shown and be a date not later than the earlier of the Agreement date or the date performance/occupancy began thereunder.

DEDUCTIBLES/ SELF-INSURED RETENTIONS (SIR) – must be disclosed to City and, if over \$500,000, approved by the City in advance and in writing, including at City's option being guaranteed, reduced, or eliminated (additionally if a SIR provides a financial guarantee guaranteeing payment of losses and related investigations, claim administration, and defense expenses). Firm shall be fully responsible for any deductible or SIR (without limiting the foregoing a policy with a SIR shall provide or be endorsed to provide that the SIR may be satisfied by either the City or named insured). In the event of loss which would have been covered but for a deductible or SIR, City may withhold from any payment due Firm, under any agreement with the City, an amount equal to same to cover such loss should full recovery not be obtained under the policy.

PERFORMANCE- All insurance policies shall be fully performable in Hillsborough County, Florida (the County), and construed in accordance with Florida law. Further, all insurance policies must expressly state that the insurance company will accept service of process in the County and that the exclusive venue for any action concerning any matter under those policies shall be in the appropriate state court of the County.

PRIMARY POLICIES - Firm's insurance coverage shall be primary insurance coverage at least as broad as ISO CG 20 01 04 13 as to the City, its elected officials, departments, officers, employees, and volunteers. Any insurance or self-insurance maintained by the City, its elected officials, departments, officers, employees, and volunteers shall be excess of the Firm's insurance and shall not contribute with it.

SUBCONTRACTORS/INDEPENDENT ASSOCIATES/CONSULTANTS/SUBTENANTS/SUBLICENSEE - **Firm shall require and verify that all such entities maintain insurance meeting all requirements stated herein with the City as an additional insured** by endorsement (ISO FORM CG 20 38, or broader) or otherwise include such entities within Firm's insurance policies. Upon City's request, Firm shall furnish complete and certified copies of copies of such entities' insurance policies, forms, and endorsements.

SUBCONTRACTOR DEFAULT INSURANCE CONTROLLED INSURANCE PROGRAM, WRAP-UP. Use requires express prior written consent of City Risk Manager.

UNAVAILABILITY- To the fullest extent permitted by law, if Firm is out of business or otherwise unavailable at the time a claim is presented to City, Firm hereby assigns to the City all of its right, title and interest (but not any liabilities or obligations) under any applicable policies of insurance.

WAIVER OF SUBROGATION – With regard to any policy of insurance that would pay third party losses, Firm hereby grants City a waiver of any right to subrogation which any insurer of Firm may acquire against the City by virtue of the payment of any loss under such insurance. Firm agrees to obtain any endorsement that may be necessary to affect such waiver, but this provision shall apply to such policies regardless.

WAIVER/RELEASE AGREEMENT – Where Firm has a defined group of persons who might be exposed to harm (e.g. participants in an athletic event/program, volunteers) any waiver or release agreement used by Firm whereby such persons (and their parent/guardian as applicable) discharge Firm from claims and liabilities, shall include the City, its elected officials, departments, officers, officials, employees, and volunteers to the same extent as Firm.

## Procurement Guidelines To Implement Minority & Small Business Participation

### Underutilized WMBE Primes by Industry Category

<b>FORMAL PROCUREMENT</b>	Construction	Construction-Related	Professional	Non-Professional	Goods
	Black	Asian	Black	Black	Black
	Hispanic	Native Am.	Hispanic	Asian	Hispanic
	Native Am.	Woman	Asian	Native Am.	Asian
	Woman		Native Am.		Native Am.
			Woman		Woman

### Underutilized WMBE Sub-Contractors / Sub-Consultants

<b>SUB WORK</b>	Construction	Construction-Related	Professional	Non-Professional	Goods
	Black	Black	Black	Black	Black
		Asian	Hispanic	Asian	Asian
		Native Am.	Asian	Native Am.	Native Am.
		Woman	Native Am.		Woman
			Woman		

#### Policy

The Guidelines apply to formal procurements and solicitations. WMBE participation will be narrowly-tailored.

#### Index

- Black = Black/African-American Business Enterprise
- Hispanic = Hispanic Business Enterprise
- Asian = Asian Business Enterprise
- Native Am. = Native American Business Enterprise
- Woman = Woman Business Enterprise (Caucasian)

#### Industry Categories

**Construction** is defined as: new construction, renovation, restoration, maintenance of public improvements and underground utilities.

**Construction-Related Services** are defined as: architecture, professional engineering, landscape architecture, design build, construction management services, or registered surveying and mapping.

**Professional Services** are defined as: attorney, accountant, medical doctor, veterinarian, miscellaneous consultant, etc.

**Non-Professional Services** are defined as: lawn maintenance, painting, janitorial, printing, hauling, security guard, etc.

**Goods** are defined as: all supplies, materials, pipes, equipment, machinery, appliances, and other commodities.

#### MBD Form-70

**Armenia Avenue at Busch Boulevard Intersection Improvements**  
**FY 20 Project 20-C-00039**  
**U-WMBE Availability Category for Construction Subcontracts is BBE )**

#	Business Name	Phone	Fax	Email	Address 1	City	State	Zip	Business Description	FEIN	Type	Ethnicity
1	Kerrick Williams Photography, LLC	813-571-3768	866-571-7149	kerrick@kerrickwilliams.com	811 Hickory Glen Drive	Seffner	FL	33584	VIDEO SERVICES	272468473	BBE	African American
1	RICH & COMPANY FLORIDA, LLC	727-351-2243		richandcoff@gmail.com	14245 Alistar Manor Drive	Wimauma	FL	33598	VIDEO SERVICES	824538175	BBE	African American
1	Shine Photo Entertainment	813-638-1602		hello@shinephotoentertainment.com	9506 Amberdale Ct. 201	Riverview	FL	33578	VIDEO SERVICES	820853961	BBE	African American
1	Snappy Plum Photos	253-222-4737		snappyplumphotos@gmail.com	2780 E. Fowler Ave #243	Tampa	FL	33612	VIDEO SERVICES	821760273	BBE	African American
1	Uborra Films LLC	813-220-2051		uborrafilms@gmail.com	24940 Hyde Park Boulevard	LAND O LAKES	FL	34639	VIDEO SERVICES	821230551	BBE	African American
2	Cornerstone Barricades Inc.	352-373-8001	352-377-8976	sevi.falade@cornerstonebarricades.com	3201 SW 42nd Street	Gainesville	FL	32608	MAINTENANCE OF TRAFFIC (MOT)	810763816	BBE	African American
2	Denson Construction Inc.	863-709-1001	863-709-1071	pete@denson-construction.com	4270 HOLDEN ROAD	LAKELAND	FL	33811	MAINTENANCE OF TRAFFIC (MOT)	893571944	BBE	African American
2	Excel 4 LLC	407-480-8976	407-480-8976	excel4llc@yahoo.com	318 N. John Young Parkway Ste #6	Kissimmee	FL	34741	MAINTENANCE OF TRAFFIC (MOT)	854149326	BBE	African American
2	Exclusive Contractors, Inc.	863-559-1039		roadcontractor2@YAHOO.COM	277 S. 10th Ave	Bartow	FL	33830	MAINTENANCE OF TRAFFIC (MOT)	892345574	BBE	African American
2	McKenzie Contracting LLC	813-454-4429	813-454-4429	valarie@mckenziecontractingllc.com	7712 W Broadway Ave	Tampa	FL	33619	MAINTENANCE OF TRAFFIC (MOT)	863561860	BBE	African American
3	PAR Development Partners, Inc.	813-374-2856	866-594-2505	ydwilson@aol.com	2109 E Palm Ave	Tampa	FL	33612	TRUCKING/HAUJUNG	205657414	BBE	African American
3	Renew Construction Services	813-990-7700		robyn@renewconstructionsservices.com	6931 WATERBROOK CT	GIBSONTON	FL	33534	TRUCKING/HAUJUNG	71907700	BBE	African American
3	Sabrina's Trucking, LLC	813-629-7210	813-986-1124	jtrucker151@aol.com	6707 trixie dr	seffner	FL	33584	TRUCKING/HAUJUNG	204083765	BBE	African American
3	Wiggins Hauling & Transfer Svc	813-562-3798	813-562-3798	Dooley813@aol.com	1506 Comanche	Tampa	FL	33610	TRUCKING/HAUJUNG	205011331	BBE	African American
4	PREMIER SALES & MARKETING LLC	571-435-1893	571-234-8566	<a href="mailto:jsaac.dinkins@premierpartnernetworks.com">jsaac.dinkins@premierpartnernetworks.com</a>	30237 HATZ WAY	Wesley Chapel	FL	33543	SIGNALIZATION	812270003	BBE	African American
6	City Wide Paving, LLC	813-325-4250	813-849-1723	citywidepavingwp@yahoo.com	2508 N. 32nd St.	Tampa	FL	33605	PAVEMENT MARKINGS	270559624	BBE	African American
7	Allen Masonry & General Contractor, Inc.	813-597-3289	813-436-0999	allenmasonrygc@gmail.com	4710 Dunquin Pl	Tampa	FL	33610	CONCRETE, SIDEWALK, CURB	893752366	BBE	African American
7	Associated Cost Engineers of Delaware, Inc.	407-704-7803	407-704-7937	jwade@aceconstructionmanagement.com	801 North Pine Hills Road	Orlando	FL	32808	CONCRETE, SIDEWALK, CURB	822333771	BBE	African American
7	Denson Construction Inc.	863-709-1001	863-709-1071	pete@denson-construction.com	4270 HOLDEN ROAD	LAKELAND	FL	33811	CONCRETE, SIDEWALK, CURB	893571944	BBE	African American
7	E/S Concrete Service, Inc.	727-560-0957	727-821-5029	enorissysr@yahoo.com	726 E. Harbor Drive	St. Petersburg	FL	33705	CONCRETE, SIDEWALK, CURB	893119582	BBE	African American
7	Excel 4 LLC	407-480-8976	407-480-8976	excel4llc@yahoo.com	318 N. John Young Parkway Ste #6	Kissimmee	FL	34741	CONCRETE, SIDEWALK, CURB	854149326	BBE	African American
7	Exclusive Contractors, Inc.	863-559-1039		roadcontractor2@YAHOO.COM	277 S. 10th Ave	Bartow	FL	33830	CONCRETE, SIDEWALK, CURB	892345574	BBE	African American
7	Fresh Start Development, Inc.	813-333-5949	813-333-5949	freshstartdevelop@yahoo.com	5508 N 50th St	Tampa	FL	33610	CONCRETE, SIDEWALK, CURB	203857845	BBE	African American
7	LMCC Specialty Contractors	407-298-6936	407-290-1217	lynn@mimssconstruction.com	119 S. Pine hills Rd.	Orlando	FL	32811	CONCRETE, SIDEWALK, CURB	893442318	BBE	African American
7	Provisions Construction & Development, Inc.	407-985-2442	407-985-2440	marrington@provisionscdi.com	3401 Lake Breeze Drive Bldg 601	Orlando	FL	32808	CONCRETE, SIDEWALK, CURB	862802435	BBE	African American
7	WC Boxes, Inc.	813-478-1102	813-864-4386	wcindustries2003@gmail.com	17620 Lake Key Drive	Odessa	FL	33556	CONCRETE, SIDEWALK, CURB	872682190	BBE	African American
8	BUN Construction Co., Inc.	813-931-9270	813-931-9185	bunconstruction@tampabay.rr.com	4135 E. Hillsborough Avenue	Tampa	FL	33610	SOD	893362663	BBE	African American
8	Cut-Ups Lawn Service	813-361-8871	813-238-2397	cutupslawnservice@yahoo.com	3217 East Powhatan Ave.	Tampa	FL	33610	SOD	811412916	BBE	African American

This Certified Contact List is the minimum contacts available and may require further searches for certified firms to meet Good Faith Efforts.



**Armenia Avenue at Busch Boulevard Intersection Improvements  
 FY 20 Project 20-C-00039  
 U-WMBE Availability Contact List  
 (The Underutilized WMBE Industry Category for Construction Subcontracts is BBE )**

#	Business Name	Phone	Fax	Email	Address 1	City	State	Zip	Business Description	FEIN	Type	Ethnicity
8	David's lawncare	813-334-4096		davidrasheed2@gmail.com	9885 Morris Glen Way	Tampa	FL	33687	SOD	189662164	BBE	African American
8	Dean's Environmental Inc	813-428-2011		deank8899@gmail.com	11809 Autumn Creek Dr	Riverview	FL	33569	SOD	74774375	BBE	African American
8	Fresh Start Development, Inc.	813-758-5345	813-333-5949	freshstartdevelop@yahoo.com	5508 N 50th St	Tampa	FL	33610	SOD	03857845	BBE	African American
8	Grass & Landscaping Hunters LLC	813-770-6795		grasslandscapinghunters@hotmail.com	914 Burlwood St	Brandon	FL	33511	SOD	21161283	BBE	African American
8	Moses & Wourman Maintenance Inc.	813-244-7134	813-920-1430	ctmoses11@msn.com	13014 N Dale Mabry Ste 136	Tampa	FL	33618	SOD	50106210	BBE	African American
8	Promise Construction and Repair Solutions LLC	813-988-8633	813-988-1555	promisecarell@outlook.com	10711 North 53rd Street	TAMPA	FL	33617	SOD	64723775	BBE	African American
8	T. C. C Enterprise Inc	813-606-9148	813-237-0396	tcc_inc@live.com	3902 E POWHATAN AVE	TAMPA	FL	33610	SOD	63223645	BBE	African American
8	Trimen Precision Lawn Care, LLC	813-863-9328		account@trimenlawn.com	1004 Lady Guinevere Drive	Valrico	FL	33594	SOD	74625126	BBE	African American
8	Twenty-Nine 11 Property Services, LLC	813-420-4987		twentynine11propertyservices@gmail.com	13736 Ogakor Dr	Riverview	FL	33579	SOD	41949792	BBE	African American
8	WC Boxes, Inc.	813-478-1102	813-864-4386	wcindustries2003@gmail.com	17620 Lake Key Drive	Odessa	FL	33556	SOD	72682190	BBE	African American
8	Williams Landscape Management Co., Inc.	813-628-8048	813-628-8041	tonywilliams@wimslandscape.com	5710 N 50th St	Tampa	FL	33610	SOD	93516370	BBE	African American
9	Excel 4 LLC	407-480-8976	407-480-8976	excel4llc@yahoo.com	318 N. John Young Parkway Ste #6	Kissimmee	FL	34741	CONCRETE REMOVAL	54149326	BBE	African American
9	Exclusive Contractors, Inc.	863-559-1039		roadcontractor2@YAHOO.com	277 S. 10th Ave	Bartow	FL	33830	CONCRETE REMOVAL	92345574	BBE	African American
9	MBattle Construction llc	727-214-4301	727-517-3774	moebattle@hotmail.com	470 maple way	safety harbor	FL	34695	CONCRETE REMOVAL	60840117	BBE	African American
#	Excel 4 LLC	407-480-8976	407-480-8976	excel4llc@yahoo.com	318 N. John Young Parkway Ste #6	Kissimmee	FL	34741	CLEARING AND GRUBBING	54149326	BBE	African American
#	Exclusive Contractors, Inc.	863-559-1039		roadcontractor2@YAHOO.com	277 S. 10th Ave	Bartow	FL	33830	CLEARING AND GRUBBING	92345574	BBE	African American
#	MBattle Construction llc	727-214-4301	727-517-3774	moebattle@hotmail.com	470 maple way	safety harbor	FL	34695	CLEARING AND GRUBBING	60840117	BBE	African American
#	Analytic Engineering, Inc.	813-841-6548	813-902-6584	Astewart@Analytic-Engineering.com	15627 N HIMES AVENUE	TAMPA	FL	33618	UTILITY RELOCATIONS	62728893	BBE	African American
#	Construction & Engineering Services Consultant	904-652-1186	904-652-1191	sDavis@gandesconsult.com	9432 Baymeadows Rd Ste 100	Jacksonville	FL	32256	UTILITY RELOCATIONS	60150833	BBE	African American
#	EAC Consulting, Inc.	305-265-5400	305-264-5507	eat@eacconsult.com	500 Winderley Place	Maitland	FL	32751	UTILITY RELOCATIONS	50519739	BBE	African American
#	ECO 2000 INC	352-793-5060	352-793-9074	WATERWORKS@ECO2000INC.COM	1611 W C-48	BUSHNELL	FL	33513	UTILITY RELOCATIONS	93648996	BBE	African American
#	MBattle Construction llc	727-214-4301	727-517-3774	moebattle@hotmail.com	470 maple way	safety harbor	FL	34695	UTILITY RELOCATIONS	60840117	BBE	African American
#	McKenzie Contracting LLC	813-454-4429	813-454-4429	valarie@mckenziecontractingllc.com	1712 W Broadway Ave	Tampa	FL	33619	UTILITY RELOCATIONS	63561860	BBE	African American
#	OHC Environmental Engineering, Inc.	813-626-8156	813-435-2389	jrpk@ohcnet.com	701 S Hoover Blvd, Suite 101	Tampa	FL	33609	UTILITY RELOCATIONS	92314222	BBE	African American
#	RHC and Associates Inc	813-254-0907	813-254-0744	jobin19@spectraengr.com	2338 W. Palmetto St.	Tampa	FL	33607	UTILITY RELOCATIONS	93046707	BBE	African American
#	Spectra Engineering & Research, Inc.	407-951-8844	850-942-2717	spectra@spectraengr.com	1060 Maitland Center Commons	Maitland	FL	32751	UTILITY RELOCATIONS	93009648	BBE	African American
#	WBQ Design & Engineering, Inc.	407-839-4300	407-839-1621	ccasto@wbq.com	201 N. Magnolia Avenue Ste 200	Orlando	FL	32801	UTILITY RELOCATIONS	93207004	BBE	African American
#	BUN Construction Co., Inc.	813-931-8270	813-931-9185	bunconstruction@tampabay.rr.com	4135 E. Hillsborough Avenue	Tampa	FL	33610	FENCING	93362663	BBE	African American
#	Fresh Start Development, Inc.	813-758-5345	813-333-5949	freshstartdevelop@yahoo.com	5508 N 50th St	Tampa	FL	33610	FENCING	03857845	BBE	African American

**Armenia Avenue at Busch Boulevard Intersection Improvements  
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 SLBE Availability Contact List**

#	Business Name	Phone	Fax	Email	Address 1	City	State	Zip	Business Description	FEIN	Cert. Type	Ethnicity
1	A Business Forms & Pegboard Systems, Inc.	813-933-2788		social@amediamarketing.com	3104 North Armenia Avenue, Ste 2	Tampa	FL	33607	VIDEO SERVICES	891559977	SLBE	Caucasian
1	Florida Contractors Video Service, Inc	813-737-1774	813-737-6151	FCVSI@aol.com	4412 Holloway Meadow Lane	Plant City	FL	33567	VIDEO SERVICES	850373535	SLBE	Caucasian
1	Frederick Communications & Consulting LLC	813-759-9149	813-281-2006	Frederick.Communications@gmail.com	3853 Northdale Blvd #112	Tampa	FL	33624	VIDEO SERVICES	800240902	SLBE	Hispanic American
1	Kerrick Williams Photography, LLC	813-571-3768	866-571-7149	kerrick@kerrickwilliams.com	811 Hickory Glen Drive	Seffner	FL	33584	VIDEO SERVICES	872468473	SLBE	African American
1	Litencia Para Diversite	813-992-3110	727-896-4911	vanesacahuas@hotmail.com	16814 LE CLARE SHORES DR	TAMPA	FL	33624	VIDEO SERVICES	854690994	SLBE	Hispanic American
1	Renker Eich Parks Architects Inc.	727-821-2986		rheadland@reparch.com	1609 Dr WLK Jr Street North	St. Petersburg	FL	33704	VIDEO SERVICES	892755330	SLBE	Caucasian
1	RICH & COMPANY FLORIDA, LLC	727-351-2243		richandcoff@gmail.com	14245 Alistar Manor Drive	Wimauma	FL	33598	VIDEO SERVICES	824538175	SLBE	African American
1	Shine Photo Entertainment	813-638-1602		hello@shinetheentertainment.com	9506 Amberdale Ct. 201	Riverview	FL	33578	VIDEO SERVICES	820853961	SLBE	African American
1	Snappy Plum Photos	253-222-4737		snappyplumphotos@gmail.com	2780 E. Fowler Ave #243	Tampa	FL	33612	VIDEO SERVICES	821760273	SLBE	African American
1	Ubora Films LLC	813-220-2051		uborafilms@gmail.com	24940 Hyde Park Boulevard	LAND O LAKES	FL	34639	VIDEO SERVICES	821230551	SLBE	African American
1	Uppercase, Inc.	813-226-3096		matt@uppercaseincorporated.com	5108 N Nebraska Ave	Tampa	FL	33603	VIDEO SERVICES	862817255	SLBE	Caucasian
2	Beato Group, Inc.	813-250-0196		Info@BeatoGroup.com	8961 Turnstone Haven Place	Tampa	FL	33619	MAINTENANCE OF TRAFFIC (MOT)	854003966	SLBE	Hispanic American
2	Casto Construction, Inc.	727-585-4714	727-585-5091	cconstr@tampabay.rr.com	9001 126TH AVE N	LARGO	FL	33773	MAINTENANCE OF TRAFFIC (MOT)	892548614	SLBE	Hispanic American
2	Cornerstone Barricades Inc.	352-373-8001	352-377-8976	seyl.falade@cornerstonebarricades.com	3201 SW 42nd Street	Gainesville	FL	32608	MAINTENANCE OF TRAFFIC (MOT)	810763816	SLBE	African American
2	Exclusive Contractors, Inc.	863-559-1039	000-000-0000	roadcontractor2@YAHOO.COM	277 S. 10th Ave	Bartow	FL	33830	MAINTENANCE OF TRAFFIC (MOT)	892345574	SLBE	African American
2	McKenzie Contracting LLC	813-454-4429	813-454-4429	valerie@mckenziecontractingllc.com	7712 W Broadway Ave	Tampa	FL	33619	MAINTENANCE OF TRAFFIC (MOT)	865951860	SLBE	African American
2	Parking Lot Stripping Service Inc.	813-623-1454		fernandoplss@aol.com	3901 E LAKE AVE	TAMPA	FL	33610	MAINTENANCE OF TRAFFIC (MOT)	860324264	SLBE	Hispanic American
2	SAFETY ZONE SPECIALISTS	863-984-1385	863-984-0139	ofmg@saftyzonespecialists.com	8341 EPCENTER BLVD	LAKE LAND	FL	33809	MAINTENANCE OF TRAFFIC (MOT)	893122879	SLBE	Caucasian
3	Cordova Transport Inc	813-284-6953	813-284-6952	cordovatrnsport@aol.com	7006 E. 9th Ave.	Tampa	FL	33619	TRUCKING/HAULING	872503834	SLBE	Hispanic American
3	J & M MATERIALS OF RIVERVIEW INC.	813-478-2102	813-409-3880	JANDMMATERIALS@GMAIL.COM	6321 Muck Pond Rd	Seffner	FL	33584	TRUCKING/HAULING	893387607	SLBE	Caucasian
3	Jansav Trucking, LLC	813-300-1846	813-704-6324	jansavtrucking@gmail.com	3017 Leila Estelle Dr	Plant City	FL	33565	TRUCKING/HAULING	872179144	SLBE	Hispanic American
3	LIBERTY HAULING INC	863-984-1462	863-984-1542	ruth@libertyhauling.com	7144 EVERGREEN BLVD	POLK CITY	FL	33868	TRUCKING/HAULING	874553022	SLBE	Caucasian
3	ODESSA TRUCKING INC	813-920-1715	813-920-8673	odessatrucking@msn.com	18136 GUNN HWY	ODESSA	FL	33556	TRUCKING/HAULING	893334628	SLBE	Hispanic American
3	Ortzak Construction Group, LLC	813-961-6023	813-961-6023	dcastro@ortzak.com	13014 N. Dale Mabry Hwy, Ste 623	Tampa	FL	33612	TRUCKING/HAULING	854837502	SLBE	Hispanic American
3	PAR Development Partners, Inc.	813-374-2856	866-594-2905	dwilson@aol.com	1109 N Palm Ave	Tampa	FL	33612	TRUCKING/HAULING	205657414	SLBE	African American
3	Renew Construction Services	813-990-7700		robbyn@renewconstructionsservices.com	6931 WATERBROOK CT	GIBSONTON	FL	33534	TRUCKING/HAULING	871907700	SLBE	African American
3	Sabrina's Trucking, LLC	813-628-7210	813-986-1124	jtrucker151@aol.com	6707 Irme dr	seffner	FL	33584	TRUCKING/HAULING	804083765	SLBE	African American
3	Suarez Grading Enterprises, Inc.	813-663-9037	813-620-4158	l.suarez@suarezgrading.com	3215 36th Ave SE	Ruskin	FL	33570	TRUCKING/HAULING	841681751	SLBE	Hispanic American
3	Wiggins Hauling & Transfer Svc	786-768-0925	813-562-3798	tullpantucking@gmail.com	1506 Comanche	Tampa	FL	33713	TRUCKING/HAULING	861844694	SLBE	Hispanic American
4	Black Dog Inc	813-249-6398	813-249-6399	Dooley813@aol.com	6744 Memorial Hwy	Tampa	FL	33610	TRUCKING/HAULING	205011331	SLBE	African American
4	PREMIER SALES & MARKETING LLC	571-435-1893	571-234-8566	ISAAC.DINKINS@PREMIERPARTNERNETWORKS	30237 HATZ WAY	Tampa	FL	33543	SIGNALIZATION	800037159	SLBE	Caucasian
5	Black Dog Inc	813-249-6398	813-249-6399	service@nextdaysignstampa.com	6744 Memorial Hwy	Tampa	FL	33615	SIGNAGE	800037159	SLBE	Caucasian
6	City Wide Paving, LLC	813-325-4250	813-849-1723	citywiddepaving@yahoo.com	2508 N. 32nd St.	Tampa	FL	33605	PAVEMENT MARKINGS	870559624	SLBE	African American
7	Allen Masonry & General Contractor, Inc.	813-597-3289	813-436-0999	allenmasonry@gmail.com	4710 Dunquin Pl	Tampa	FL	33610	CONCRETE, SIDEWALK, CURB	893724266	SLBE	African American
7	Beato Group, Inc.	813-250-0196		Info@BeatoGroup.com	8961 Turnstone Haven Place	Tampa	FL	33619	CONCRETE, SIDEWALK, CURB	854003966	SLBE	Hispanic American
7	CARIA CONSTRUCTION, INC	813-304-7158		Carly@pulleconcrete.com	18803 cherrybirch cir	lutz	FL	33558	CONCRETE, SIDEWALK, CURB	863665283	SLBE	Caucasian
7	E/S Concrete Service, Inc.	727-821-5029	727-821-5029	enorisysr@yahoo.com	726 E. Harbor Drive	St. Petersburg	FL	33705	CONCRETE, SIDEWALK, CURB	893119582	SLBE	African American
7	Exclusive Contractors, Inc.	863-559-1039	000-000-0000	roadcontractor2@YAHOO.COM	277 S. 10th Ave	Bartow	FL	33830	CONCRETE, SIDEWALK, CURB	892345574	SLBE	African American
7	Fresh Start Development, Inc.	813-756-5345	813-333-5949	freshstartdevelop@yahoo.com	5508 N 50th St	Tampa	FL	33610	CONCRETE, SIDEWALK, CURB	803878485	SLBE	African American
7	JNandlal Maintenance Services of Brandon, LLC	813-679-7769	813-654-7675	JamesNandlal@msn.com	3008 King Phillip Way	Seffner	FL	33584	CONCRETE, SIDEWALK, CURB	860821164	SLBE	Caucasian
7	Parking Lot Stripping Service Inc.	813-623-1454	813-664-0140	fernandoplss@aol.com	3901 E LAKE AVE	TAMPA	FL	33610	CONCRETE, SIDEWALK, CURB	860324264	SLBE	Hispanic American
7	Quick Construction Solutions, LLC	813-377-9997	813-374-5949	quicksolutions@aol.com	4501 N. Saint Vincent St.	Tampa	FL	33614	CONCRETE, SIDEWALK, CURB	890097289	SLBE	Hispanic American
7	WC Boxes, Inc.	813-478-1102	813-864-4386	wcindustries2003@gmail.com	17620 Lake Key Drive	Odeesa	FL	33556	CONCRETE, SIDEWALK, CURB	872682190	SLBE	African American
8	AGRO-TURF CORP.	813-267-8156	813-741-9253	beatriz@agroturf.org	11810 Bullfrog Creek Rd.	Gibsonton	FL	33534	CONCRETE, SIDEWALK, CURB	805501762	SLBE	Hispanic American
8	Always Green Landscaping, Inc.	813-2516-0823		alwaysgreengreenlandscapinginc@gmail.com	6501 Sawyer Court	Tampa	FL	33634	CONCRETE, SIDEWALK, CURB	820580963	SLBE	Hispanic American

This Certified Contact List is the minimum contacts available and may require further searches for certified firms to meet Good Path Efforts.

**Armenia Avenue at Busch Boulevard Intersection Improvements  
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 SLBE Availability Contact List**

#	Business Name	Phone	Fax	Email	Address 1	City	State	Zip	Business Description	FEIN	Cert. Type	Ethnicity
8	Baron's Landscaping Services, Inc.	813-404-1509	813-443-4919	baronslawn@aoi.com	2415 East Sligh Avenue	Tampa	FL	33610	SOD	850837654	SLBE	Hispanic American
8	BUN Construction Co., Inc.	813-931-8270	813-931-9185	bunconstruction@tampabay.fl.com	4135 E. Hillsborough Avenue	Tampa	FL	33610	SOD	893362663	SLBE	African American
8	Cardinal Landscaping Services of Tampa, Inc.	813-915-9696	813-915-9695	msmante@yaho.com	817 E. Okaloosa Ave.	Tampa	FL	33604	SOD	893394554	SLBE	Caucasian
8	Cut-Ups Lawn Service	813-361-8871	813-238-2397	cutupslawn@yaho.com	3217 East Powhatan Ave.	Tampa	FL	33610	SOD	811412916	SLBE	African American
8	D & J LAWN SERVICES OF LAKELAND LLC	863-859-3525		DAUNDIAWNSERVICES@HOTMAIL.COM	575 Old Polk City Road	Lakeland	FL	33809	SOD	873279070	SLBE	Hispanic American
8	David's Landscaping	813-334-4096		davidrashed2@gmail.com	9885 Morris Glen Way	Tampa	FL	33687	SOD	88962164	SLBE	African American
8	Dean's Environmental Inc.	813-428-2011		deank8859@gmail.com	11809 Autumn Creek Dr	River View	FL	33569	SOD	874774375	SLBE	African American
8	Florida Natives Nursery, Inc.	813-754-1900	813-754-4001	office@florid nativesnursery.com	4115 NATIVE GARDEN DR	PLANT CITY	FL	33565	SOD	899561539	SLBE	Caucasian
8	Fresh Start Development, Inc.	813-758-5345	813-333-5949	freshstartdev@yaho.com	5508 N 50th St	Tampa	FL	33610	SOD	803857845	SLBE	African American
8	GardenSmith	813-352-3008		gardensmith@me.com	4113 Henderson Blvd	Tampa	FL	33629	SOD	873649269	SLBE	Caucasian
8	Grass & Landscaping Hunters LLC	813-770-6795		grasslandscapinghunters@hotmail.com	914 Burlwood St	Brandon	FL	33511	SOD	821161283	SLBE	African American
8	Green Expectations Landscaping LLC	813-782-6263	813-315-6461	INFO@XFL.COM	37609 Eliand Blvd.	Zephyrhills	FL	33542	SOD	862054130	SLBE	Hispanic American
8	Johnson's Excavation & Services, Inc.	813-752-7097	813-719-9052	sales@jesccontracting.com	1706 East Trapnell Road	Plant City	FL	33566	SOD	893031174	SLBE	Caucasian
8	JTCM Inc	813-935-7724		office@lawnsculptures.net	8175 MacDill Ave	Tampa	FL	33609	SOD	862418914	SLBE	Caucasian
8	Moses & Wourman Maintenance Inc.	813-244-7134	813-920-1430	ctmose11@msn.com	13014 N Dale Mabry Ste 136	Tampa	FL	33618	SOD	850105210	SLBE	African American
8	Nelson's Tree Farm and Nursery, Inc.	813-842-4663	813-350-9139	kimberly.martinez23@gmail.com	5027 N Lois Ave	Tampa	FL	33614	SOD	893404710	SLBE	Hispanic American
8	Promise Construction and Repair Solutions LLC	813-988-8633	813-988-1555	promisecarrell@outlook.com	10711 North 53rd Street	TAMPA	FL	33617	SOD	864723775	SLBE	African American
8	RODRIGUEZ SOD RANCH INC	813-886-2163		rodriquezrod@yaho.com	7608 W Linebaugh Ave	Tampa	FL	33625	SOD	855303273	SLBE	Hispanic American
8	Sunbelt Sod & Grading Company	813-641-9855	813-645-7263	sunbeltsod@verizon.net	819 - 9th St. N.E.	Ruskin	FL	33570	SOD	834240983	SLBE	Caucasian
8	T.C.C Enterprise Inc	813-606-9148	813-237-0396	tcc_inc@live.com	3902 E POWHATAN AVE	TAMPA	FL	33610	SOD	863223645	SLBE	African American
8	Trimen Precision Lawn Care, LLC	813-863-9328		account@trimenlawn.com	1004 Lady Guinevere Drive	Valrico	FL	33594	SOD	874625126	SLBE	African American
8	WC Boxes, Inc.	813-478-1102	813-864-4386	wcindustries2003@gmail.com	17620 Lake Ky Drive	Odesa	FL	33556	SOD	872682190	SLBE	African American
8	Williams Landscape Management Co., Inc.	813-628-8048	813-628-8041	tonywilliams@wmslandscapes.com	5710 N 50th St	Tampa	FL	33610	SOD	893516370	SLBE	African American
9	2 Meyer Corp.	813-210-4864	813-645-5634	Renatony@aol.com	6308 Lake Sunrise Dr.	Apollo Beach	FL	33572	CONCRETE REMOVAL	862384669	SLBE	Caucasian
9	Exclusive Contractors, Inc.	863-259-1039	000-000-0000	roadcontractor2@YAHOO.com	2775 .10th Ave	Barrow	FL	33830	CONCRETE REMOVAL	892345574	SLBE	African American
9	John Varrati, LLC	813-938-1818	813-260-3725	magnumdemo@live.com	1609 North 31st Street	Tampa	FL	33605	CONCRETE REMOVAL	872161968	SLBE	Caucasian
9	Johnson's Excavation & Services, Inc.	813-752-7097	813-719-9052	sales@jesccontracting.com	1706 East Trapnell Road	Plant City	FL	33566	CONCRETE REMOVAL	893031174	SLBE	Caucasian
9	MBattle Construction llc	727-214-4301	727-517-3774	moebattle@hotmail.com	470 maple way	safety harbor	FL	34695	CONCRETE REMOVAL	860840117	SLBE	African American
9	Ortzak Construction Group, LLC	813-961-6023	813-961-6023	dcastro@ortzak.com	13014 N. Dale Mabry Hwy, Suite 623	Tampa	FL	33618	CONCRETE REMOVAL	854837502	SLBE	Hispanic American
9	Parking Lot Stripping Service Inc.	813-623-1454	813-664-0140	fernandopls@aol.com	3901 E LAKE AVE	TAMPA	FL	33610	CONCRETE REMOVAL	860324264	SLBE	Hispanic American
9	TNT Environmental, LLC	352-567-1822	352-567-6374	tntenvironmental@gmail.com	17852 Pine Knoll Drive	Dade City	FL	33523	CONCRETE REMOVAL	863864129	SLBE	Caucasian
#	2 Meyer Corp.	813-210-4864	813-645-5634	Renatony@aol.com	6308 Lake Sunrise Dr.	Apollo Beach	FL	33572	CLEARING AND GRUBBING	862384669	SLBE	Caucasian
#	Exclusive Contractors, Inc.	863-259-1039	000-000-0000	roadcontractor2@YAHOO.com	2775 .10th Ave	Barrow	FL	33830	CLEARING AND GRUBBING	892345574	SLBE	African American
#	John Varrati, LLC	813-938-1818	813-260-3725	magnumdemo@live.com	1609 North 31st Street	Tampa	FL	33605	CLEARING AND GRUBBING	872161968	SLBE	Caucasian
#	Johnson's Excavation & Services, Inc.	813-752-7097	813-719-9052	sales@jesccontracting.com	1706 East Trapnell Road	Plant City	FL	33566	CLEARING AND GRUBBING	893031174	SLBE	Caucasian
#	MBattle Construction llc	727-214-4301	727-517-3774	moebattle@hotmail.com	470 maple way	safety harbor	FL	34695	CLEARING AND GRUBBING	860840117	SLBE	African American
#	Ortzak Construction Group, LLC	813-961-6023	813-961-6023	dcastro@ortzak.com	13014 N. Dale Mabry Hwy, Ste 623	TAMPA	FL	33618	CLEARING AND GRUBBING	854837502	SLBE	Hispanic American
#	Parking Lot Stripping Service Inc.	813-623-1454	813-664-0140	fernandopls@aol.com	3901 E LAKE AVE	TAMPA	FL	33610	CLEARING AND GRUBBING	860324264	SLBE	Hispanic American
#	TNT Environmental, LLC	352-567-1822	352-567-6374	tntenvironmental@gmail.com	17852 Pine Knoll Drive	Dade City	FL	33523	CLEARING AND GRUBBING	863864129	SLBE	Caucasian
#	5M CIVIL LLC	813-728-3050		syvlva_merly@5mciwil.com	12506 Bronco Drive	TAMPA	FL	33626	UTILITY RELOCATIONS	821698832	SLBE	Hispanic American
#	ADEAS-Q, LLC	813-495-7382		jcollins@adeas-q.com	446 North Second Street, Ste 100	St. Petersburg	FL	33701	UTILITY RELOCATIONS	873687248	SLBE	Caucasian
#	Advantage Engineering, Inc.	813-975-9638	813-994-5265	aeba@verizon.net	3914 Flatiron Loop #102	Wesley Chapel	FL	33544	UTILITY RELOCATIONS	893695629	SLBE	Caucasian
#	Analytic Engineering, Inc.	813-841-6548	813-902-6584	Asterwar@Analytic-Engineering.com	15627 N HIMES AVENUE	TAMPA	FL	33618	UTILITY RELOCATIONS	862728893	SLBE	African American
#	Applied Sciences Consulting, Inc.	813-228-0900	813-454-2454	earaj@appliedcfi.com	1000 N Ashley Drive, Suite 500	Tampa	FL	33602	UTILITY RELOCATIONS	803212557	SLBE	Caucasian
#	Award Engineering, Inc.	813-238-4933	813-237-3909	awardengineering@yahoo.com	7804 N. Florida Ave.	Tampa	FL	33604	UTILITY RELOCATIONS	892984471	SLBE	Asian American
#	BBE - Boggs Engineering LLC	813-747-9100	813-754-2967	sboggs@boggseng.com	607 S Alexander Street Ste 101	Plant City	FL	33563	UTILITY RELOCATIONS	800759192	SLBE	Caucasian
#	Campo Engineering, Inc.	813-215-7372	813-902-8782	laur@campoengineering.com	1725 E 5th Avenue	Tampa	FL	33605	UTILITY RELOCATIONS	803666833	SLBE	Caucasian

**Armenia Avenue at Busch Boulevard Intersection Improvements  
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 SLBE Availability Contact List**

#	Business Name	Phone	Fax	Email	Address 1	City	State	Zip	Business Description	FEIN	Cert. Type	Ethnicity
#	Castco Construction, Inc.	727-585-4714	727-585-5091	cconstr@tampabay.rr.com	9001 126TH AVE N	LARGO	FL	33713	UTILITY RELOCATIONS	892548614	SLBE	Hispanic American
#	Catalano Engineering, Inc.	813-254-1265		gavlon@celtampa.com	2119 West Cass Street	Tampa	FL	33606	UTILITY RELOCATIONS	893218407	SLBE	Caucasian
#	Communication Support Network, Inc	727-433-2200	727-683-9220	csn2sara@gmail.com	2550 28th Ave N	St. Petersburg	FL	33713	UTILITY RELOCATIONS	030379746	SLBE	Caucasian
#	Environmental Engineering Consultants, Inc.	813-237-3781	813-238-0036	awallace@eec-tampabay.com	5119 North Florida Avenue	Tampa	FL	33603	UTILITY RELOCATIONS	891961870	SLBE	Caucasian
#	Grissom Smith, LLC	813-230-3632		grissomj@grissomsmith.com	12406 Pony Court	Tampa	FL	33626	UTILITY RELOCATIONS	811279730	SLBE	Caucasian
#	Hough Engineering, Inc.	941-747-4838	941-747-4072	mhough@hougheng.com	1771 Manatee Avenue West	Bradenton	FL	34205	UTILITY RELOCATIONS	850726290	SLBE	Caucasian
#	Kempton Rinard, Inc.	813-258-0066	813-258-1783	tkempton@hka-design.com	2207 W North A Street	Tampa	FL	33606	UTILITY RELOCATIONS	893213809	SLBE	Caucasian
#	MBattle Construction llc	727-214-4301	727-517-3774	moebattle@hotmail.com	470 maple way	safety harbor	FL	34695	UTILITY RELOCATIONS	060840117	SLBE	African American
#	McKenzie Contracting LLC	813-454-4429	813-454-4429	valarie@mckenziecontractingllc.com	7712 W Broadway Ave	Tampa	FL	33619	UTILITY RELOCATIONS	863561860	SLBE	African American
#	Metzger + Willard, Inc.	813-977-6005	813-977-0593	nmetzger@metzgerwillard.com	8600 Hidden River Parkway	Tampa	FL	33637	UTILITY RELOCATIONS	891907168	SLBE	Caucasian
#	MPH Civil Consultants, Inc.	813-731-0052		duane@mphcivil.com	7720 Pullara Drive	Odessa	FL	33556	UTILITY RELOCATIONS	863276942	SLBE	Caucasian
#	Otero Engineering, Inc.	813-936-3585	813-936-3585	otero@oteroengineering.com	13902 N. Dale Mabry Hwy.	Tampa	FL	33618	UTILITY RELOCATIONS	850806517	SLBE	Hispanic American
#	RHC and Associates Inc	813-254-0907	813-254-0744	robini19@tampabay.rr.com	2338 W. Palmetto St.	Tampa	FL	33607	UTILITY RELOCATIONS	893046707	SLBE	African American
#	Right of Way Contracting, LLC.	813-309-0724	813-926-9251	kellfi@verizon.net	11205 Tarpon Springs Road	Odessa	FL	33556	UTILITY RELOCATIONS	812829280	SLBE	Caucasian
#	Sunrise Utility Construction, Inc.	813-949-3749	813-949-0408	LMNBOS@AOL.COM	P.O. Box 272293	Tampa	FL	33688	UTILITY RELOCATIONS	893034012	SLBE	Caucasian
#	Terra Tectonics Design Group, Inc.	727-441-4504		jtoner@terratectonics.com	1188 Kapp Drive	Clearwater	FL	33765	UTILITY RELOCATIONS	893114953	SLBE	Caucasian
#	Vivid Consulting Group LLC.	813-985-8100	813-988-8108	mercedes@vividpros.com	701 W FLETCHER AVE STE A	TAMPA	FL	33612	UTILITY RELOCATIONS	814106123	SLBE	Hispanic American
#	Waller Consulting Engineering LLC	813-220-4413		Wallerconsultingengineering@gmail.com	2309 West Watrous Avenue	Tampa	FL	33629	UTILITY RELOCATIONS	82772828	SLBE	Caucasian
#	Watermark Engineering Group, Inc.	813-641-1200	000-000-0000	mflint@watermarkengineers.com	3868 Sun City Center	Sun City Center	FL	33573	UTILITY RELOCATIONS	801109830	SLBE	Hispanic American
#	Best Made Enterprises, Inc.	813-248-5266	813-248-1299	info@BestMadeFence.com	4133 Causeway Blvd.	Tampa	FL	33619	FENCING	893498525	SLBE	Hispanic American
#	BUN Construction Co., Inc.	813-931-8270	813-931-9185	bunconstruction@tampabay.rr.com	4135 E. Hillborough Avenue	Tampa	FL	33610	FENCING	893362663	SLBE	African American
#	Communication Support Network, Inc	727-433-2200	727-683-9220	csn2sara@gmail.com	2550 28th Ave N	St. Petersburg	FL	33713	FENCING	030379746	SLBE	Caucasian
#	Fresh Start Development, Inc.	813-758-5345	813-333-5949	freshstartdevelop@yahoo.com	5508 N 50th St	Tampa	FL	33610	FENCING	003857845	SLBE	African American
#	JEB Management, Inc.	813-968-1921	813-241-6070	info@fence4u.biz	5804 N. Occident Street	Tampa	FL	33614	FENCING	030416868	SLBE	Caucasian

**Armenia Avenue at Busch Boulevard Intersection Improvements  
 FY 20 Project 20-C-00039  
 Non-UWMBE/SLBE Availability Contact List**

This Certified Contact List is the minimum contacts available and may require further searches for certified firms to meet Good Faith Efforts.												
#	Business Name	Phone	Fax	Email	Address 1	City	State	Zip	Business Description	FEIN	Cert. Type	Ethnicity
1	Frederick Communications & Consulting LLC	813-758-9149	813-281-2006	Frederick.Communications@gmail.com	3853 Northdale Blvd #112	Tampa	FL	33624	VIDEO SERVICES	800240902	HBE	Hispanic American
1	Licencia Para Divertirse	813-992-3110		vanesacahuas@hotmail.com	16814 LE CLARE SHORES DR	TAMPA	FL	33624	VIDEO SERVICES	854690994	HBE	Hispanic American
1	A Business Forms & Pegboard Systems, Inc.	813-933-2788		social@amediamarketing.com	3104 North Armenia Avenue, Ste 2	Tampa	FL	33607	VIDEO SERVICES	891559977	WBE	Caucasian
1	Florida Contractors Video Service, Inc	813-737-1774	813-737-1774	FCVSI@aol.com	4412 Holloway Meadow Lane	Plant City	FL	33567	VIDEO SERVICES	850373535	WBE	Caucasian
1	JML Advertising, Inc.	407-353-6782	407-788-2136	KathyKhan@aol.com	550 Birdsong Court	Longwood	FL	32779	VIDEO SERVICES	893750544	WBE	Caucasian
1	LP Video Productions, Inc.	407-896-9727	866-702-5438	laurie@lp-video.com	181 Elsa Street	Orlando	FL	32806	VIDEO SERVICES	893556752	WBE	Caucasian
2	MOTPLANS.COM	813-600-7884	954-759-9186	SATTYA@MOTPLANS.COM	4928 Old Winter Garden Road	Orlando	FL	32811	MAINTENANCE OF TRAFFIC (MOT)	760742303	ABE	Asian American
2	Beato Group, Inc.	813-252-0196		Info@BeatoGroup.com	8961 Turnstone Haven Place	Tampa	FL	33619	MAINTENANCE OF TRAFFIC (MOT)	854003966	HBE	Hispanic American
2	Casto Construction, Inc.	727-585-4714	727-585-5091	cconstr@tampabay.rr.com	9001 126TH AVE N	LARGO	FL	33773	MAINTENANCE OF TRAFFIC (MOT)	892548614	HBE	Hispanic American
2	Parking Lot Striping Service Inc.	813-623-1454	813-664-0140	fermandopiss@aol.com	3901 E LAKE AVE	TAMPA	FL	33610	MAINTENANCE OF TRAFFIC (MOT)	260324264	HBE	Hispanic American
2	Professional Concrete, Inc.	941-921-3660	941-921-5371	david@professionalconcrete.com	5220 McIntosh Road, Suite 1	Sarasota	FL	34233	MAINTENANCE OF TRAFFIC (MOT)	850715612	HBE	Hispanic American
2	BLACKTIP SERVICES INC	954-324-5300	321-285-2995	blacktipemail@yahoo.com	52 RILEY RD STE 422	CELEBRATION	FL	34747	MAINTENANCE OF TRAFFIC (MOT)	274431832	WBE	Caucasian
2	Florida Drawbridges, Inc	954-788-0969	954-943-3214	lporte@floridadrawbridges.com	1901 E Atlantic Blvd	Pompano Beach	FL	33060	MAINTENANCE OF TRAFFIC (MOT)	850946504	WBE	Caucasian
2	TRAFFIC CONTROL PRODUCTS OF FLORIDA INC	813-621-8484	813-621-4611	kw@trafficontrolproducts.org	5514 CARMACK RD	TAMPA	FL	33610	MAINTENANCE OF TRAFFIC (MOT)	892582822	WBE	Caucasian
3	Cordova Transport Inc	813-284-6953	813-284-6952	cordovatransport@aol.com	7006 E. 9th Ave.	Tampa	FL	33619	TRUCKING/HAULING	272503834	HBE	Hispanic American
3	Jansay Trucking, LLC	813-300-1846	813-704-6324	jansaytrucking@gmail.com	3017 Lella Estelle Dr	Plant City	FL	33565	TRUCKING/HAULING	872179144	HBE	Hispanic American
3	Jason's Hauling, Inc.	813-872-8440	813-875-7202	jason@jasonshauling.com	4508 OAK FAIR BLVD	TAMPA	FL	33610	TRUCKING/HAULING	893219239	HBE	Hispanic American
3	ODESSA TRUCKING INC	813-918-1715	813-920-8673	odessatrucking@msn.com	18136 GUNN HWY	ODESSA	FL	33556	TRUCKING/HAULING	893334628	HBE	Hispanic American
3	Ortak Construction Group, LLC	813-961-6023	813-961-6023	dcastro@ortak.com	13014 N. Dale Mabry Hwy, Ste623	Tampa	FL	33618	TRUCKING/HAULING	854837502	HBE	Hispanic American
3	Suarez Grading Enterprises, Inc.	813-663-9037	813-620-4158	lsuarez@suarezgrading.com	3215 36th Ave SE	Ruskin	FL	33570	TRUCKING/HAULING	841681751	HBE	Hispanic American
3	TULIPAN TRUCKING LLC	786-768-0925		tulipantucking@gmail.com	4051 Benson Avenue North	St. Petersburg	FL	33713	TRUCKING/HAULING	861844694	HBE	Hispanic American
3	Dirf on Demand, LLC	813-280-9941		vanesa.bergin@yahoo.com	3802 Ehrlich Rd	Tampa	FL	33624	TRUCKING/HAULING	861493303	WBE	Caucasian
3	LIBERTY-HAULING INC	863-984-1462	863-984-1542	ruth@libertyhauling.com	7444 EVERGREEN BLVD	POLK CITY	FL	33868	TRUCKING/HAULING	87453022	WBE	Caucasian
4	B & E Signal and Lighting, Inc.	941-758-3594	941-758-3805	nisa@beutility.com	6447 33RD ST E	SARASTOA	FL	34243	SIGNALIZATION	202880417	ABE	Asian American
4	Eco Partnering Innovations, LLC	407-377-7540		info@ecopartnering.com	1708 Elaine Avenue	Altamonte Spring	FL	32701	SIGNALIZATION	862931633	WBE	Caucasian
4	Thomas Sign and Awning Company, Inc.	727-573-7757	727-573-0328	amee.pavovich@thomassign.com	4590 118th Avenue North	Clearwater	FL	33762	SIGNALIZATION	891436573	WBE	Caucasian
5	Eco Partnering Innovations, LLC	407-377-7540	727-573-0328	info@ecopartnering.com	1708 Elaine Avenue	Altamonte Spring	FL	32701	SIGNALIZATION	862931633	WBE	Caucasian
5	Thomas Sign and Awning Company, Inc.	727-573-7757	727-573-0328	amee.pavovich@thomassign.com	4590 118th Avenue North	Clearwater	FL	33762	SIGNALIZATION	891436573	WBE	Caucasian
6	Cornerstone Construction Services, Inc.	407-299-3299	407-299-3294	astone@csorlando.com	4205 Edgewater Drive Suite A	Orlando	FL	32804	PAVEMENT MARKINGS	892864526	HBE	Hispanic American
6	MONDRAGON PAVING, LLC	813-405-4335		mondragonpaving@gmail.com	6721 N. Armenia Ave	Tampa	FL	33604	PAVEMENT MARKINGS	813559492	HBE	Hispanic American
7	Aireko Energy Solutions US, LLC	407-706-2800	787-654-6300	hrievra@ireko.com	2415 W Sand Lake Rd., Ste. E	Orlando	FL	32809	CONCRETE, SIDEWALK, CURB	872826227	HBE	Hispanic American
7	Beato Group, Inc.	813-252-0196		Info@BeatoGroup.com	8961 Turnstone Haven Place	Tampa	FL	33619	CONCRETE, SIDEWALK, CURB	854003966	HBE	Hispanic American
7	Central Florida Contractors Inc	727-596-0708	727-596-0707	sidewalks@aol.com	13345 Pine Bark Ct	Laigo	FL	33774	CONCRETE, SIDEWALK, CURB	893119568	HBE	Hispanic American
7	Cornerstone Construction Services, Inc.	407-299-3299	407-299-3294	astone@csorlando.com	4205 Edgewater Drive Suite A	Orlando	FL	32804	CONCRETE, SIDEWALK, CURB	892864526	HBE	Hispanic American
7	Curb Man, Inc.	863-967-3557	863-967-3557	gabaldon@juno.com	P.O. Box 1303	Auburndale	FL	33823	CONCRETE, SIDEWALK, CURB	893580955	HBE	Hispanic American
7	Parking Lot Striping Service Inc.	813-623-1454	813-664-0140	fermandopiss@aol.com	3901 E LAKE AVE	TAMPA	FL	33610	CONCRETE, SIDEWALK, CURB	260324264	HBE	Hispanic American

# Armenia Avenue at Busch Boulevard Intersection Improvements

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## Non-UWMBE/SLBE Availability Contact List

#	Business Name	Phone	Fax	Email	Address 1	City	State	Zip	Business Description	FEIN	Cert. Type	Ethnicity
7	Professional Concrete, Inc.	941-921-3660	941-921-5371	david@professionalconcrete.com	5220 McIntosh Road, Suite 1	Sarasota	FL	34233	CONCRETE, SIDEWALK, CURB	850715612	HBE	Hispanic American
7	Quick Construction Solutions, LLC	813-374-5849	813-374-5849	quickcs@outlook.com	4501 N. Saint Vincent St.	Tampa	FL	33614	CONCRETE, SIDEWALK, CURB	900972890	HBE	Hispanic American
7	BLACKTIP SERVICES INC	954-324-5300	321-285-2995	blacktipemail@yahoo.com	52 RILEY RD STE 422	CELEBRATION	FL	34747	CONCRETE, SIDEWALK, CURB	074431832	WBE	Caucasian
7	CARIA CONSTRUCTION, INC	813-304-7158		Carly@kulesconcrete.com	18803 cherrybirch cir	lutz	FL	33558	CONCRETE, SIDEWALK, CURB	463665283	WBE	Caucasian
7	Construction Supply of Southwest Florida, Inc.	941-366-2322	941-366-7435	coloradolala@aol.com	2223 12TH STREET	SARASOTA	FL	34237	CONCRETE, SIDEWALK, CURB	060001316	WBE	Caucasian
7	Diamant Development LLC	352-551-3194		diamantdevelopmentllc@gmail.com	905 Spring Valley Rd	Altamonte Spring	FL	32714	CONCRETE, SIDEWALK, CURB	813746486	WBE	Caucasian
7	KAT Materials Inc.	727-834-8655	727-834-8670	orders@katinc.us	6541 Industrial Ave	Port Richey	FL	34668	CONCRETE, SIDEWALK, CURB	831019704	WBE	Caucasian
8	AGRO-TURF CORP.	813-867-8156	813-741-9253	beatriz@agroturf.org	11810 Bullfrog Creek Rd.	Gibsonton	FL	33534	SOD	205501762	HBE	Hispanic American
8	Always Green Landscaping Inc.	813-516-0823		alwaysgreenlandscapinginc@gmail.com	6501 Sawyer Court	Tampa	FL	33634	SOD	020580963	HBE	Hispanic American
8	Baron's Landscaping Services, Inc.	813-404-1509	813-443-4919	baronslawncare@aol.com	2415 East Sligh Avenue	Tampa	FL	33610	SOD	850837654	HBE	Hispanic American
8	D & J LAWN SERVICES OF LAKELAND LLC	863-859-3525		DANDILANSERVICES@HOTMAIL.COM	575 Old Polk City Road	Lakeland	FL	33809	SOD	073279070	HBE	Hispanic American
8	GREEN EXPECTATIONS LANDSCAPING LLC	813-782-2663	813-315-6461	INFO@GXFL.COM	37609 Eiland Blvd.	Zephyrhills	FL	33542	SOD	062054130	HBE	Hispanic American
8	Landscape Maintenance Professionals, Inc.	813-757-6500	813-757-6501	kelly.vickers@lmp.com	13050 E US Highway 92	Dover	FL	33527	SOD	893613665	HBE	Hispanic American
8	Nelson's Tree Farm and Nursery, Inc.	813-842-4663	813-350-9139	kimberly.martinez33@gmail.com	5027 N. Lois Ave	Tampa	FL	33614	SOD	893404710	HBE	Hispanic American
8	Pine Lake Nursery & Landscape, Inc.	813-948-4736	813-948-4914	janet@pinelakenureseryinc.com	2122 Henry Rd	Lutz	FL	33558	SOD	893499734	HBE	Hispanic American
8	RODRIGUEZ SOD RANCH INC	813-886-2163		rodriguezso ranch@yahoo.com	7608 W Linebaugh Ave	Tampa	FL	33625	SOD	465303273	HBE	Hispanic American
8	Diamant Development LLC	352-551-3194		diamantdevelopmentllc@gmail.com	905 Spring Valley Rd	Altamonte Spring	FL	32714	SOD	813746486	WBE	Caucasian
8	GardenSmith	813-352-3008		gardensmith@me.com	4113 Henderson Blvd	Tampa	FL	33629	SOD	073649269	WBE	Caucasian
8	JTCM Inc	813-935-7724		office@jawnsculptures.net	817 S MacDill Ave	Tampa	FL	33609	SOD	862418914	WBE	Caucasian
8	Sunbelt Sod & Grading Company	813-641-9855	813-645-7263	sunbeltsod@verizon.net	819 - 9th St. N.E.	Ruskin	FL	33570	SOD	834250933	WBE	Caucasian
9	Central Florida Contractors Inc	727-596-0708	727-596-0707	sidewalks@aol.com	13345 Pine Bark Ct	Largo	FL	33774	CONCRETE REMOVAL	893119568	HBE	Hispanic American
9	Cornerstone Construction Services, Inc.	407-299-3299	407-299-3294	astone@ccsflorlando.com	4205 Edgewater Drive Suite A	Orlando	FL	32804	CONCRETE REMOVAL	892864926	HBE	Hispanic American
9	Ortzak Construction Group, LLC	813-961-6023	813-961-6023	dcastro@ortzak.com	13014 N. Dale Mabry Hwy, Ste 623	Tampa	FL	33618	CONCRETE REMOVAL	854837502	HBE	Hispanic American
9	Parking Lot Stripping Service Inc.	813-623-1454	813-664-0140	fernandopiss@aol.com	3901 E LAKE AVE	TAMPA	FL	33610	CONCRETE REMOVAL	06034264	HBE	Hispanic American
9	Professional Concrete, Inc.	941-921-3660	941-921-5371	david@professionalconcrete.com	5220 McIntosh Road, Suite 1	Sarasota	FL	34233	CONCRETE REMOVAL	850715612	HBE	Hispanic American
9	UJT LLC	786-519-4534		ujtllc@aol.com	10675 SW 190th St	Miami	FL	33157	CONCRETE REMOVAL	072112762	HBE	Hispanic American
9	BLACKTIP SERVICES INC	954-324-5300	321-285-2995	blacktipemail@yahoo.com	52 RILEY RD STE 422	CELEBRATION	FL	34747	CONCRETE REMOVAL	074431832	WBE	Caucasian
9	Flave A. Williams III Dozer Service, Inc.	727-856-6298	727-856-6298	nwilliams@flavewilliamsdozerservice.com	14717 Hays Road	Spring Hill	FL	34610	CONCRETE REMOVAL	893225884	WBE	Caucasian
9	FORRISTALL ENTERPRISES INC	941-729-8150	941-729-7345	fei@forristall.com	2712 63rd Avenue East	Bradenton	FL	34203	CONCRETE REMOVAL	850227771	WBE	Caucasian
#	Central Florida Contractors Inc	407-299-3299	407-299-3294	sidewalks@aol.com	13345 Pine Bark Ct	Largo	FL	33774	CLEARING AND GRUBBING	893119568	HBE	Hispanic American
#	Cornerstone Construction Services, Inc.	407-299-3299	407-299-3294	astone@ccsflorlando.com	4205 Edgewater Drive Suite A	Orlando	FL	32804	CLEARING AND GRUBBING	892864926	HBE	Hispanic American
#	Ortzak Construction Group, LLC	813-961-6023	813-961-6023	dcastro@ortzak.com	13014 N. Dale Mabry Hwy, Ste 623	Tampa	FL	33618	CLEARING AND GRUBBING	854837502	HBE	Hispanic American
#	Parking Lot Stripping Service Inc.	813-623-1454	813-664-0140	fernandopiss@aol.com	3901 E LAKE AVE	TAMPA	FL	33610	CLEARING AND GRUBBING	06034264	HBE	Hispanic American
#	Professional Concrete, Inc.	941-921-3660	941-921-5371	david@professionalconcrete.com	5220 McIntosh Road, Suite 1	Sarasota	FL	34233	CLEARING AND GRUBBING	850715612	HBE	Hispanic American
#	UJT LLC	786-519-4534		ujtllc@aol.com	10675 SW 190th St	Miami	FL	33157	CLEARING AND GRUBBING	072112762	HBE	Hispanic American
#	BLACKTIP SERVICES INC	954-324-5300	321-285-2995	blacktipemail@yahoo.com	52 RILEY RD STE 422	CELEBRATION	FL	34747	CLEARING AND GRUBBING	074431832	WBE	Caucasian
#	Flave A. Williams III Dozer Service, Inc.	727-856-6298	727-856-6298	nwilliams@flavewilliamsdozerservice.com	14717 Hays Road	Spring Hill	FL	34610	CLEARING AND GRUBBING	893225884	WBE	Caucasian
#	FORRISTALL ENTERPRISES INC	941-729-8150	941-729-7345	fei@forristall.com	2712 63rd Avenue East	Bradenton	FL	34203	CLEARING AND GRUBBING	850227771	WBE	Caucasian

**Armenia Avenue at Busch Boulevard Intersection Improvements  
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 Non-UWMBE/SLBE Availability Contact List**

#	Business Name	Phone	Fax	Email	Address 1	City	State	Zip	Business Description	FEIN	Cert. Type	Ethnicity
#	Award Engineering, Inc.	813-238-4393	813-237-3909	awardengineering@yahoo.com	7804 N. FloridaAve.	Tampa	FL	33604	UTILITY RELOCATIONS	592981471	ABE	Asian American
#	Capital Consulting Solutions, LLC	239-273-8894		adam.ahmad@capitalengr.com	9010 Strada Steel Ct.	Naples	FL	34109	UTILITY RELOCATIONS	820845707	ABE	Asian American
#	EPIC Engineering & Consulting Group, LLC	407-381-3742	407-480-2534	carey@epicgroupllc.com	1511 E. STATE ROAD 434, STE. 3033	WINTER SPRINGS	FL	32708	UTILITY RELOCATIONS	205909230	ABE	Asian American
#	H.T. MAI, INC.	813-962-6230	813-962-6420	hmai@aol.com	14031 N. Dale Mabry Highway	Tampa	FL	33618	UTILITY RELOCATIONS	593160934	ABE	Asian American
#	ICON Consultant Group Inc	813-962-8689		mmills@iconconsultantgroup.com	10006 N Dale Mabry Hwy	TAMPA	FL	33618	UTILITY RELOCATIONS	593576100	ABE	Asian American
#	L & S Diversified, LLC	407-681-3836		sherry.namor@issuveyor.com	405 Lake Howell Rd	Maitland	FL	32751	UTILITY RELOCATIONS	727336599	ABE	Asian American
#	PATEL GREENE AND ASSOCIATES P L L C	813-728-3060		hiren.patel@pateigreene.com	215 East Main Street	Bartow	FL	33830	UTILITY RELOCATIONS	452209743	ABE	Asian American
#	SM CIVIL LLC	727-698-9513		sybilva_merly@5mccivil.com	12506 Bronco Drive	TAMPA	FL	33626	UTILITY RELOCATIONS	421698832	HBE	Hispanic American
#	A&B Engineering Consultants PA	786-412-8682	844-426-6354	luis@anbccompanies.com	14164 Stilton St	Tampa	FL	33626	UTILITY RELOCATIONS	260524250	HBE	Hispanic American
#	A.D.A. Engineering, Inc.	786-436-7700	305-551-8977	jargudin@adaeng.net	8550 NW 33rd St	Miami	FL	33122	UTILITY RELOCATIONS	592064498	HBE	Hispanic American
#	CALTRAM Engineering Group, Inc.	727-585-4714	786-456-7700	ccalderon@caltrangroup.com	790 NW 107th Ave	Miami	FL	33172	UTILITY RELOCATIONS	274564005	HBE	Hispanic American
#	Castro Construction, Inc.	813-444-5190	727-585-5091	cconstr@tampabayrr.com	9001 126TH AVE N	LARGO	FL	33773	UTILITY RELOCATIONS	592548614	HBE	Hispanic American
#	CES Consultants, Inc.	813-386-2101	813-386-2106	cesinfo@cesconsult.com	101 EAST KENNEDY BLVD	TAMPA	FL	33602	UTILITY RELOCATIONS	650792884	HBE	Hispanic American
#	Element Engineering Group LLC	813-988-8100	305-591-8777	digit@elementeng.com	1713 E. 9th Avenue	TAMPA	FL	33605	UTILITY RELOCATIONS	562565488	HBE	Hispanic American
#	F. R. Aleman & Associates, Inc.	813-871-5331	813-871-5135	marketing@fr-aleman.com	10305 NW 41 STREET STE 200	DORAL	FL	33178	UTILITY RELOCATIONS	592751524	HBE	Hispanic American
#	Kisinger Campo & Assoc., Corp./KCCS, Inc	813-936-3585	813-936-3585	operations@kisingercampo.com	201 N Franklin St.	Tampa	FL	33602	UTILITY RELOCATIONS	591677145	HBE	Hispanic American
#	Otero Engineering, Inc.	786-519-4534		coterooteroengineering.com	13902 N. Dale Mabry Hwy.	Tampa	FL	33618	UTILITY RELOCATIONS	650806517	HBE	Hispanic American
#	UJT LLC	443-994-2597	813-643-2432	utillc@aol.com	10675 SW 190th St	Miami	FL	33157	UTILITY RELOCATIONS	272127262	HBE	Hispanic American
#	Van Doornik Engineering & Consulting, LLC	813-988-8100	813-988-8108	brigidavid@yahoo.com	7234 Lithia Pinecrest Rd	Lithia	FL	33547	UTILITY RELOCATIONS	823180172	HBE	Hispanic American
#	Vivid Consulting Group LLC.	813-641-1200	000-000-0000	mercedes@vividpro.com	701 W FLETCHER AVE STE A	TAMPA	FL	33612	UTILITY RELOCATIONS	844106123	HBE	Hispanic American
#	Watermark Engineering Group, Inc.	813-944-3464	813-944-4959	mflint@watermarkengineers.com	3868 Sun City Centy	Sun City Center	FL	33573	UTILITY RELOCATIONS	201109830	HBE	Hispanic American
#	AREHVA Engineering, Inc.	813-215-7372	813-902-8782	lauren@campoengineering.com	5012 W. Lemon Street	Tampa	FL	33609	UTILITY RELOCATIONS	265947444	WBE	Caucasian
#	Campo Engineering, Inc.	813-977-7270	813-977-5419	jmcrory@arehva.com	1725 E 5th Avenue	Tampa	FL	33605	UTILITY RELOCATIONS	203666833	WBE	Caucasian
#	Carl Hankins, Inc.	727-856-3765	813-261-5142	terrih@chichiseinc.com	14512 N. Nebraska Ave.	Tampa	FL	33613	UTILITY RELOCATIONS	591400178	WBE	Caucasian
#	Faller, Davis & Associates, Inc.	813-248-5366	727-856-6298	infrown@fallerdavis.com	4200 W. Cypress St.	Tampa	FL	33607	UTILITY RELOCATIONS	592594956	WBE	Caucasian
#	Flave A. Williams III Dozer Service, Inc.	813-230-3632		nwilliams@flavewilliamsdozerservice.com	14717 Hays Road	Spring Hill	FL	34610	UTILITY RELOCATIONS	593225884	WBE	Caucasian
#	Grisson Smith, LLC	941-747-4838	941-747-4072	grissom@grissomsmith.com	12406 Pony Court	Tampa	FL	33626	UTILITY RELOCATIONS	811279730	WBE	Caucasian
#	Hough Engineering, Inc.	813-968-6659		mhough@hougheng.com	1771 Manatee Avenue West	Bradenton	FL	34205	UTILITY RELOCATIONS	850726290	WBE	Caucasian
#	Juturna Consulting	813-977-6005	813-977-0593	admin@juturnaconsulting.com	15711 Mapledale Boulevard	Tampa	FL	33624	UTILITY RELOCATIONS	831509290	WBE	Caucasian
#	Metzger + Willard, Inc.	813-949-3749	813-949-0408	lmetzger@metzgerwillard.com	8600 Hidden River Parkway	Tampa	FL	33637	UTILITY RELOCATIONS	591907168	WBE	Caucasian
#	Sunrise Utility Construction, Inc.	813-248-5366	813-248-1299	lmineros@aul.com	P.O. Box 272293	Tampa	FL	33688	UTILITY RELOCATIONS	593034012	WBE	Caucasian
#	Best Made Enterprises, Inc.	407-757-2016	407-654-4700	info@BestMadeFence.com	4133 Causeway Blvd.	Tampa	FL	33619	FENCING	593498525	HBE	Hispanic American
#	KMG Fence, LLC	407-757-2016	407-654-4700	kmg@kmgfence.com	2320 CLARK STREET UNIT A4	APOPKA	FL	32703	FENCING	834226271	WBE	Caucasian

Instructions Regarding Use of the WMBE/SLBE Availability Contact List

**Bidders must solicit a subcontracting bid from ALL of the firms listed on the WMBE/SLBEs list provided within the Specifications,** and provide documentation of emails, faxes, phone calls, letters, or other communication with the firms as a first step in demonstrating Good-Faith Efforts to achieve the goal set for WMBE/SLBE participation on this contract.

The list is formatted to facilitate e-mailing of a solicitation to the listed firms by copying and pasting the email addresses.

The WMBE/SLBE participation Goal is based upon the availability of the certified firms indicated on the contact list. The Goal and Requirements of the City's Equal Business Opportunity Program are stated in the Bid/Contract Document, Specifications.



PROPOSAL

To the Mayor and City Council of the City of Tampa, Florida:

Legal Name of Bidder: \_\_\_\_\_

Bidder's Fictitious Name, if applicable: \_\_\_\_\_

Bidder is a/an:  Individual  Partnership\*  Joint Venture\*  LLC  Corp.  Other:

Bidder is organized under the laws of:  State of Florida  Other:

Bidder Mailing Address: \_\_\_\_\_

Bidder's Federal Employee Identification No. (FEI/EIN): \_\_\_\_\_

Bidder's License No.: \_\_\_\_\_ Bidder's FDOS (SUNBIZ) Doc. No.: \_\_\_\_\_  
*(See Ch. 489. FS; use entity's, individual's only if applicable)*

Bidder Contact Name\*\*: \_\_\_\_\_ Email: \_\_\_\_\_ Phone: (\_\_\_\_) \_\_\_\_\_

Bidder's own initial application for employment has criminal history screening practices similar in nature to the practices contained in Chapter 12, Article VI, City of Tampa Code (*Responses, whether "Yes" or "No", are for informational purposes only and will not be used as a basis of award or denial, nor as a basis for any protest*):  Yes  No

The below named person, appearing before the undersigned authority and after being first duly sworn, for him/herself and on behalf of the entity submitting this Proposal does hereby affirm and declare as follows:

- (1) He/She is of lawful age and is authorized to act on behalf of Bidder (the individual, partnership, corporation, entity, etc. submitting this Proposal) and that all statements made in this document are true and correct to the best of my knowledge.
- (2) If Bidder is operating under a fictitious name, Bidder has currently complied with any and all laws and procedures governing the operation of businesses under fictitious names in the State of Florida
- (3) No person or entity other than Bidder has any interest in this Proposal or in the Contract proposed to be entered into.
- (4) This Proposal is made without any understanding, agreement, or connection with any person or entity making Proposal for the same purposes, and is in all respects fair and without collusion or fraud.
- (5) Bidder is not in arrears to the City of Tampa, upon debt or contract, and is not a defaulter, as surety or otherwise, upon any obligation to the City of Tampa.
- (6) That no officer or employee or person whose salary is payable in whole or in part from the City Treasury is, shall be or become interested, directly or indirectly, as a contracting party, partner, stockholder, surety or otherwise, in this Proposal, or in the performance of the Contract, or in the supplies, materials, or equipment and work or labor to which it relates, or in any portion of the profits thereof.
- (7) Bidder has carefully examined and fully understands the Solicitation and has full knowledge of the scope, nature, and quality of the work to be performed; furthermore, Bidder has carefully examined the site of the work and that, from his own investigations, he has satisfied himself as to the nature and location of the work, the character, quality, and quantity of materials and the kinds and extent of equipment and other facilities needed for the performance of the work, the general and local conditions and all difficulties to be encountered, and all other items which may, in any way, affect the work or its performance.
- (8) Bidder (including its principals)  has |  has NOT been debarred or suspended from contracting with a public entity.
- (9) Bidder  has |  has NOT implemented a drug-free workplace program that meets the requirements of Section 287.087, Florida Statutes.
- (10) Bidder has carefully examined and fully understands all the component parts of the Contract Documents and agrees Bidder will execute the Contract, provide the required Public Construction Bond, and will fully perform the work in strict accordance with the terms of the Contract and Contract Documents therein referred to for the following prices, to wit:

\* If a Partnership or Joint Venture, attach Partnership or Joint Venture Agreement.

\*\* Someone the City may contact with questions/correspondence regarding this Solicitation and/or permits.

**Contract 20-C-00039;  
Armenia Avenue at Busch Boulevard Intersection Improvements**

SUMMARY OF ROADWAY		PAY ITEMS					
PAY ITEM NO.	PAY ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE	
0101 1	MOBILIZATION	LS	1				
0102 1	MAINTENANCE OF TRAFFIC CONTINGENCY	LS	1	One hundred twenty-five thousand dollars and no cents	\$125,000.00	\$ 125,000.00	
0102107 1	TEMPORARY TRAFFIC DETECTION AND MAINTENANCE, INTERSECTION	ED	250				
0104 10. 3	SEDIMENT BARRIER	LF	1325				
0104 18	INLET PROTECTION SYSTEM	EA	13				
0110 1. 1	CLEARING & GRUBBING (AC = 3.08)	LS	1				
0110 4.10	REMOVAL OF EXISTING CONCRETE PAVEMENT	SY	2992				
0120 1	REGULAR EXCAVATION	CY	2411.9				
0120 6	EMBANKMENT	CY	616.5				
0160 4	TYPE B STABILIZATION	SY	5815				
0285707	OPTIONAL BASE, BASE GROUP 07	SY	4052				
0285709	OPTIONAL BASE, BASE GROUP 09	SY	583				
0286 2	TURNOUT CONSTRUCTION-ASPHALT	TN	88.4				
0327 70. 4	MILLING EXIST ASPH PAVT, 3" AVG DEPTH	SY	4723				
0327 70. 6	MILLING EXIST ASPH PAVT, 1.5" AVG DEPTH	SY	2882				
0334 1.53	SUPERPAVE ASPHALTIC CONC (TRAFFIC C, PG 76-22)	TN	802.7				
0337 7.83	ASPHALT CONCRETE FRICTION COURSE (TRAFFIC C, FC-12.5, PG 76-22)	TN	1038.1				
0339 1	MISCELLANEOUS ASPHALT PAVEMENT	TN	3.5				
0400 1. 2	CONCRETE CLASS I, ENDWALLS	CY	1.2				
0425 1341	INLETS, CURB, TYPE P-4, <10'	EA	1				
0425 1351	INLETS, CURB, TYPE P-5, <10'	EA	2				
0425 1471	INLETS, CURB, TYPE 7, <10'	EA	1				
0425 2.41	MANHOLES, P-7, <10'	EA	2				
0425 2.43	MANHOLES, P-7, PARTIAL	EA	2				
0425 2.71	MANHOLES, J-7, <10'	EA	1				
0425 5	MANHOLE, ADJUST	EA	2				
0425 5. 1	MANHOLE, ADJUST, UTILITIES	EA	2				
0425 6	VALVE BOXES, ADJUST	EA	26				
0430175115	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 15"S/CD	LF	95				
0430175118	PIPE CULVERT, OPTIONAL MATERIAL, ROUND, 18"S/CD	LF	1313				
0430175215	PIPE CULVERT, OPTIONAL MATERIAL, OTHER, ELIP/ARCH, 15"S/CD	LF	36				
0430175218	PIPE CULVERT, OPTIONAL MATERIAL, OTHER, ELIP/ARCH, 18"S/CD	LF	4				
0430982125	MITERED END SECTION, OPTIONAL ROUND, 18" CD	EA	1				
0430984125	MITERED END SECTION, OPTIONAL ROUND, 18" SD	EA	1				

**Contract 20-C-00039;  
Armenia Avenue at Busch Boulevard Intersection Improvements**

PAY ITEM NO.	PAY ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
0515 1 1	PEDESTRIAN / BICYCLE RAILING, STEEL, 42"	LF	20			
0520 1 7	CONCRETE CURB & GUTTER, TYPE E	LF	199			
0520 1 10	CONCRETE CURB & GUTTER, TYPE F	LF	5304			
0520 2 4	CONCRETE CURB, TYPE D	LF	132			
0520 5 11	TRAFFIC SEPARATOR CONCRETE-TYPE I, 4" WIDE	LF	220			
0520 6	SHOULDER GUTTER - CONCRETE	LF	54			
0522 2	CONCRETE SIDEWALK AND DRIVEWAYS, 6" THICK	SY	3118			
0522 4	BUS SHELTER PAD, CONCRETE	SY	36			
0527 2	DETECTABLE WARNINGS	SF	408			
0530 3 4	RIPRAP RUBBLE F&I, DITCH LINING	TN	21			
0550 10220	FENCING, TYPE B, 5.1-6.0', STANDARD	LF	459			
0550 60237	FENCE GATE, TYPE B, SLIDING/CANTILEVER, GREATER THAN 30' OPENING	EA	1			
0570 1 1	PERFORMANCE TURF	SY	60			
0570 1 2	PERFORMANCE TURF, SOD	SY	4693			
COT425 1	COT STANDARD INLET TYPE BV-1	EA	3			
COT425 2	COT STANDARD INLET TYPE BS-1	EA	4			
COT425 5	COT STANDARD INLET TYPE T	EA	2			
COT425 5m	COT STANDARD INLET TYPE T, (MODIFIED)	EA	1			
<b>A - TOTAL</b>						

**PAY ITEMS**

<b>SUMMARY OF SIGNING AND PAVEMENT MARKINGS</b>						
PAY ITEM NO.	PAY ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
0700 1 11	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF	AS	43			
0700 1 12	SINGLE POST SIGN, F&I GROUND MOUNT, 12-20 SF	AS	3			
0700 1 50	SINGLE POST SIGN, RELOCATE	AS	15			
0700 1 60	SINGLE POST SIGN, REMOVE	AS	24			
0700 2 60	MULTI-POST SIGN, REMOVE	AS	1			
0700 3 601	SIGN PANEL, REMOVE, UP TO 12 SF	EA	4			
0700 13 15	RETROREFLECTIVE SIGN STRIP, FURNISH AND INSTALL, 5'	EA	2			
0705 11 1	DELINEATOR, FLEXIBLE TUBULAR	EA	8			
0710 11190	PAINTED PAVEMENT MARKINGS, STANDARD, WHITE, ISLAND NOSE	SF	7			
0710 11290	PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, ISLAND NOSE	SF	94			
0710 90	PAINTED PAVEMENT MARKINGS - FINAL SURFACE	LS	1			
0711 11102	THERMOPLASTIC, STANDARD, WHITE, SOLID, 8" FOR URBAN ISLAND	GM	0.031			
0711 11103	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR DROP LANE	GM	0.087			
0711 11123	THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK	LF	1185			
0711 11125	THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE	LF	409			
0711 11141	THERMOPLASTIC, STANDARD, WHITE, (2/4) DOTTED GUIDE LINE (6/10) GAP EXTENSION, 6"	GM	0.228			
0711 11160	THERMOPLASTIC, STANDARD, WHITE, MESSAGE OR SYMBOL	EA	13			
0711 11170	THERMOPLASTIC, STANDARD, WHITE, ARROWS	EA	28			
0711 11224	THERMOPLASTIC, STANDARD, YELLOW, SOLID, 18" FOR DIAGONALS	LF	141			
0711 11241	THERMOPLASTIC, STANDARD, YELLOW, (2/4) DOTTED GUIDE LINE, 6"	GM	0.048			
0711 14125	THERMOPLASTIC, PREFORMED, WHITE, SOLID, 24" FOR CROSSWALK	LF	1124			

**Contract 20-C-00039;  
Armenia Avenue at Busch Boulevard Intersection Improvements**

0711 16101	THERMOPLASTIC, STD - OTHER SURFACES, WHITE, SOLID, 6"	GM	0.901				
0711 16131	THERMOPLASTIC, STD - OTHER SURFACES, WHITE, (10/30) SKIP, 6"	GM	0.107				
0711 16133	THERMOPLASTIC, STD - OTHER SURFACES, WHITE, (3/9) SKIP, 12" FOR DROP LANE	GM	0.122				
0711 16201	THERMOPLASTIC, STD - OTHER SURFACES, YELLOW, SOLID, 6"	GM	0.669				
0711 17 1	THERMOPLASTIC; REMOVE EXISTING THERMOPLASTIC PAVEMENT MARKINGS	SF	85				
<b>B - TOTAL</b>							

**PAY ITEMS**

<b>SUMMARY OF LIGHTING</b>							
PAY ITEM NO.	PAY ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE	
0715 1 60	LIGHTING CONDUCTORS, REMOVE & DISPOSE, CONTRACTOR OWNS	LF	1110				
0715 4 70	LIGHT POLE COMPLETE; REMOVE POLE AND FOUNDATION	EA	1				
0715 21 1	LIGHTING REPAIRS- ELECTRICAL WORK	LS	1				
<b>C - TOTAL</b>							
PAY ITEM NO.	PAY ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE	
0630 2 11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	LF	366				
0630 2 12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	LF	335				
0630 2 14	CONDUIT, FURNISH & INSTALL, ABOVEGROUND	LF	20				
0632 7 1	SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	PI	1				
0632 7 6	SIGNAL CABLE REMOVE- INTERSECTION	PI	1				
0633 8 1	MULTI-CONDUCTOR COMMUNICATION CABLE, FURNISH & INSTALL	LF	199				
0634 4153	SPAN WIRE ASSEMBLY, F&I, TWO POINT, BOX OR DROP BOX	PI	1				
0634 5 1	FIBERGLASS INSULATOR, FURNISH & INSTALL	LF	48				
0635 2 11	PULL & SPLICE BOX, F&I, 13" x 24" COVER SIZE	EA	12				
0635 2 12	PULL & SPLICE BOX, F&I, 24" X 36" COVER SIZE	EA	2				
0639 1122	ELECTRICAL POWER SERVICE, F&I, UNDERGROUND, METER PURCHASED BY CONTRACTOR	AS	1				
0639 2 1	ELECTRICAL SERVICE WIRE, FURNISH & INSTALL	LF	35				
0639 3 11	ELECTRICAL SERVICE DISCONNECT, F&I, POLE MOUNT	EA	1				
0641 2 11	PRESTRESSED CONCRETE POLE, F&I, TYPE P-II PEDESTAL	EA	1				
0641 2 17	PRESTRESSED CONCRETE POLE, F&I, TYPE P-VII	EA	4				
0641 2 70	PRESTRESSED CONCRETE POLE, SHALLOW POLE REMOVAL- POLE 30' AND GREATER	EA	2				
0646 1 11	ALUMINUM SIGNALS POLE, PEDESTAL	EA	8				
0646 1 60	ALUMINUM SIGNALS POLE, REMOVE	EA	8				
0650 1 14	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL ALUMINUM, 3 SECTION, 1 WAY	AS	10				
0650 1 16	VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL ALUMINUM, 4 SECTION, 1 WAY	AS	2				
0653 1 11	PEDESTRIAN SIGNAL, FURNISH & INSTALL LED COUNTDOWN, 1 WAY	AS	8				
0660 3 11	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL CABINET EQUIPMENT	EA	4				
0660 3 12	VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL, ABOVE GROUND EQUIPMENT	EA	4				
0665 1 11	PEDESTRIAN DETECTOR, FURNISH & INSTALL, STANDARD	EA	8				
0670 5112	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA, 2 PREEMPTION	AS	1				
0670 5600	TRAFFIC CONTROLLER ASSEMBLY, REMOVE CONTROLLER WITH CABINET	AS	1				
0685 1 13	UNINTERRUPTIBLE POWER SUPPLY, FURNISH AND INSTALL, LINE INTERACTIVE WITH CABINET	EA	1				
0700 5 50	INTERNALLY ILLUMINATED SIGN, RELOCATE	EA	4				
0700 11391	ELECTRONIC DISPLAY SIGN, FURNISH & INSTALL OVERHEAD MOUNT- AC POWERED, BLANK OUT SIGN, UP TO 12 SF	AS	1				
<b>D - TOTAL</b>							

**Contract 20-C-00039;  
Armenia Avenue at Busch Boulevard Intersection Improvements**

SUMMARY OF UTILITIES		PAY ITEMS				
PAY ITEM NO.	PAY ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE IN WORDS	UNIT PRICE	TOTAL PRICE
704.06	FURNISH & INSTALL 4"DIA. C900 PVC PIPE, CL-150, GREEN, 0'-6" CUT	LF	80			
2102.00	FURNISH & INSTALL 6" DUCTILE IRON PIPE	LF	46			
2104.00	FURNISH & INSTALL 8" DUCTILE IRON PIPE	LF	685			
2106.00	FURNISH & INSTALL 12" DUCTILE IRON PIPE	LF	52			
2400.40	FURNISH & INSTALL 4" DIA. C900 PVC OR DIP, BENDS, SLEEVES, REDUCERS, CAPS OR PLUGS	EA	18			
2500.00	REMOVE 1" - 3" DIA. ABANDONED PIPE	LF	844			
2501.00	REMOVE 4" - 12" DIA. ABANDONED PIPE	LF	1804			
2600.00	CUT & PLUG 3" AND SMALLER	EA	1			
2601.00	CUT & PLUG 4", 6" AND 8" PIPE	EA	4			
3042.00	FURNISH & INSTALL 8" BELL OR MECHANICAL JOINT RESTRAINTS ON EXISTING PIPE	EA	4			
3043.00	FURNISH & INSTALL 12" BELL OR MECHANICAL JOINT RESTRAINTS ON EXISTING PIPE	EA	1			
3072.00	FURNISH 8" PUSH-ON JOINT RESTRAINT GASKETS	EA	30			
3073.00	FURNISH 12" PUSH-ON JOINT RESTRAINT GASKETS	EA	4			
3304.10	FURNISH & INSTALL 4" DIA. BELL RESTRAINT	EA	2			
3304.20	FURNISH & INSTALL 4" DIA. THRUST RESTRAINT	EA	16			
4005.00	FURNISH & INSTALL 6" DUCTILE IRON MJ BEND, SLEEVE	EA	2			
4009.00	FURNISH & INSTALL 8" DUCTILE IRON MJ BEND, SLEEVE	EA	5			
4010.00	FURNISH & INSTALL 8"x6" DUCTILE IRON MJ TEE	EA	1			
4013.00	FURNISH & INSTALL 12" DUCTILE IRON MJ BEND, SLEEVE OR REDUCER	EA	2			
5000.00	FURNISH & INSTALL FULL STD. FIRE HYDRANT ASSEMBLY ON NEW OR EXISTING MAINS	EA	1			
5200.00	REMOVE & SALVAGE HYDRANT	EA	1			
6001.00	FURNISH & INSTALL 6" GATE OR TAPPING VALVE AND BOX ON DIP	EA	2			
6002.00	FURNISH & INSTALL 8" GATE OR TAPPING VALVE AND BOX ON DIP	EA	6			
6003.00	FURNISH & INSTALL 12" GATE OR TAPPING VALVE AND BOX ON DIP	EA	1			
6107.00	FURNISH & INSTALL 8" LINE STOP ON EXISTING WATER MAIN	EA	2			
6108.00	FURNISH & INSTALL 12" LINE STOP ON EXISTING WATER MAIN	EA	1			
7500.00	FURNISH & INSTALL 4" AIR RELEASE VALVE	EA	2			
8107.00	FURNISH, TAP & INSTALL 1" METER SERVICE (+15' - 80')	EA	2			
8128.00	FURNISH, TAP & INSTALL 2" METER SERVICE (+15' - 80')	EA	3			
				<b>E - TOTAL</b>		
				<b>A+B+C+D+E = TOTAL</b>		

Computed Total Price in Words: \_\_\_\_\_  
 \_\_\_\_\_ dollars and \_\_\_\_\_ cents.

Computed Total Price in Figures: \$ \_\_\_\_\_

Bidder acknowledges that the following addenda have been received and that the changes covered by the addendum(s) have been taken into account in this proposal: #1 \_\_\_\_ #2 \_\_\_\_ #3 \_\_\_\_ #4 \_\_\_\_ #5 \_\_\_\_ #6 \_\_\_\_ #7 \_\_\_\_ #8 \_\_\_\_.

Bidder acknowledges the requirements of the City of Tampa's Equal Business Opportunity Program.

Bidder acknowledges that it is aware of Florida's Trench Safety Act (Sections 553.60-553.64, Florida Statutes), and agrees that Bidder together with any involved subcontractors will comply with all applicable trench safety standards. Bidder further acknowledges that included in the various items of this Proposal and the total bid price (as applicable) are costs for complying with the Trench Safety Act. Bidder further identifies the costs and methods summarized below:

	<b>Trench Safety Measure (Description)</b>	<b>Unit of Measure (LF, SY)</b>	<b>Unit Quantity</b>	<b>Unit Cost</b>	<b>Extended Cost</b>
A.	_____	_____	_____	_____	_____
B.	_____	_____	_____	_____	_____
C.	_____	_____	_____	_____	_____
<b>Total Cost: \$</b>				_____	

Accompanying this Proposal is a certified check, cashier's check or Tampa Bid Bond (form included herein must be used) for at least five percent (5%) of the total amount of the Proposal which check shall become the property of the City, or which bond shall become forthwith due and payable to the City, if this Proposal shall be accepted by the City and the Bidder shall fail to enter into a legally binding contract with and to furnish the required Public Construction Bond to the City within twenty (20) days after the date of its receipt of written Notice of Award by the City so to do.

**FAILURE TO COMPLETE THE ABOVE MAY RESULT IN THE PROPOSAL BEING DECLARED NON-RESPONSIVE.**

[SEAL] Name of Bidder: \_\_\_\_\_  
 Authorized Signature: \_\_\_\_\_  
 Signer's Printed Name: \_\_\_\_\_  
 Signer's Title: \_\_\_\_\_

STATE OF \_\_\_\_\_  
 COUNTY OF \_\_\_\_\_

For an entity: The forgoing instrument was sworn (or affirmed) before me this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ by \_\_\_\_\_ as \_\_\_\_\_ of \_\_\_\_\_, a/n  Partnership  Joint Venture  LLC  Corp  
 Other: \_\_\_\_\_, on behalf of such entity. Such individual is  personally known to me or  produced a/n \_\_\_\_\_ state driver's license as identification.

For an individual: The forgoing instrument was sworn (or affirmed) before me this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ by \_\_\_\_\_, who is  personally known to me or  produced a/n \_\_\_\_\_ state driver's license as identification.

[NOTARY SEAL] Notary Public, State of \_\_\_\_\_  
 Notary Printed Name: \_\_\_\_\_  
 Commission No.: \_\_\_\_\_  
 My Commission Expires: \_\_\_\_\_



# Good Faith Effort Compliance Plan Guidelines

for Women/Minority Business Enterprise/Small Local Business Enterprise Participation  
City of Tampa - Equal Business Opportunity Program  
(MBD Form 50 – detailed instructions on page 2 of 2)

Contract Name \_\_\_\_\_ Bid Date \_\_\_\_\_

Bidder/Proposer \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Name \_\_\_\_\_ Title \_\_\_\_\_

The Compliance Plan with attachments is a true account of Good Faith Efforts (GFE) made to achieve the participation goals as specified for Women/Minority Business Enterprises/Small Local Business Enterprises (WMBE/SLBE) on the referenced contract:

The WMBE/SLBE participation **Goal is Met or Exceeded**. See DMI Forms 10 and 20 which accurately report all subcontractors solicited and all subcontractors to-be-utilized.

The WMBE/SLBE participation Goal is **Not Achieved**. The following list is an overview of the baseline GFE action steps already performed. Furthermore, it is understood that these GFE requirements are weighted in the compliance evaluation based on the veracity and demonstrable degree of documentation provided with the bid/proposal:

(Check applicable boxes below. Must enclose supporting documents accordingly with remarks)

- (1) Solicited through reasonable and available means the interest of WMBE/SLBEs that have the capability to perform the work of the contract. The Bidder or Proposer must solicit this interest within sufficient time to allow the WMBE/SLBEs to respond. The Bidder or Proposer must take appropriate steps to follow up initial solicitations with interested WMBE/SLBEs.  See DMI report forms for subcontractors solicited.  See enclosed supplemental data on solicitation efforts.  Qualifying Remarks:
- (2) Provided interested WMBE/SLBEs with adequate, specific scope information about the plans, specifications, and requirements of the contract, including addenda, in a timely manner to assist them in responding to the requested-scope identified by bidder/proposer for the solicitation.  See enclosed actual solicitations used.  Qualifying Remarks:
- (3) Negotiated in good faith with interested WMBE/SLBEs that have submitted bids (e.g. adjusted quantities or scale). Documentation of negotiation must include the names, addresses, and telephone numbers of WMBE/SLBEs that were solicited; the date of each such solicitation; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why agreements could not be reached with WMBE/SLBEs to perform the work. Additional costs involved in soliciting and using subcontractors is not a sufficient reason for a bidder/proposer's failure to meet goals or achieve participation, as long as such costs are reasonable. Bidders are not required to accept excessive quotes in order to meet the goal.  DMI Utilized Forms for sub-(contractor/consultant) reflect genuine negotiations  This project is an RFO/RFP in nature and negotiations are limited to clarifications of scope/specifications and qualifications.  See enclosed documentation.  Qualifying Remarks:
- (4) Not rejecting WMBE/SLBEs as being unqualified without justification based on a thorough investigation of their capabilities. The WMBE/SLBEs standing within its industry, membership in specific groups, organizations / associations and political or social affiliations are not legitimate causes for rejecting or not soliciting bids to meet the goals.  Not applicable.  See attached justification for rejection of a subcontractor's bid or proposal.  Qualifying Remarks:
- (5) Made scope(s) of work available to WMBE/SLBE subcontractors and suppliers; and, segmented portions of the work or material consistent with the available WMBE/SLBE subcontractors and suppliers, so as to facilitate meeting the goal.  Sub-Contractors were allowed to bid on their own choice of work or trade without restriction to a pre-determined portion.  See enclosed comments.  Qualifying Remarks:
- (6) Made good faith efforts, despite the ability or desire of Bidder/Proposer to perform the work of a contract with its own forces/organization. A Bidder/Proposer who desires to self-perform the work of a contract must demonstrate good faith efforts if the goal has not been met.  Sub-Contractors were not prohibited from submitting bids/proposals and were solicited on work typically self-performed by the prime.  Qualifying Remarks:
- (7) Segmented portions of the work to be performed by WMBE/SLBEs in order to increase the likelihood that the goals will be met. This includes, where appropriate, breaking out contract work items into economically feasible units (quantities/scale) to facilitate WMBE/SLBE participation, even when the Bidder/Proposer might otherwise prefer to perform these work items with its own forces.  Sub-Contractors were allowed to bid on their own choice of work or trade without restriction to a pre-determined portion.  Sub-Contractors were not prohibited from submitting bids/proposals and were solicited on work typically self-performed by the prime.  See enclosed comments.  Qualifying Remarks:
- (8) Made efforts to assist interested WMBE/SLBEs in obtaining bonding, lines of credit, or insurance as required by the city or contractor.  See enclosed documentation on initiatives undertaken and methods to accomplish.  Qualifying Remarks:
- (9) Made efforts to assist interested WMBE/SLBEs in obtaining necessary equipment, supplies, materials, or related assistance or services, including participation in an acceptable mentor-protégé program.  See enclosed documentation of initiatives and/or agreements.  Qualifying Remarks:
- (10) Effectively used the services of the City and other organizations that provide assistance in the recruitment and placement of WMBE/SLBEs.  See enclosed documentation.  The following services were used:

Note: Provide any unsolicited information that will support the Bid/RFP Compliance Evaluation.  Named Documents Are:



**Participation Plan: Guidance for Complying with Good Faith Efforts Outreach**  
**(page 2 of 2)**

1. All firms on the WMBE/SLBE Goal Setting List must be solicited and documentation provided for email, fax, letters, phone calls, and other methods of outreach/communication with the listed firms. The DMI Solicited and DMI-Utilized forms must be completed for all firms solicited or utilized. Other opportunities for subcontracting may be explored by consulting the City of Tampa MBD Office and/or researching the on-line Diversity Management Business System Directory for Tampa certified WMBE/SLBE firms.
2. Solicitation of WMBE/SLBEs, via written or electronic notification, should provide specific information on the services needed, where plans can be reviewed and assistance offered in obtaining these, if required. Solicitations should be sent a minimum of a week (i.e. 5 business days or more) before the bid/proposal date. Actual copies of the bidder's solicitation containing their scope specific instructions should be provided.
3. With any quotes received, a follow-up should be made when needed to confirm detail scope of work. For any WMBE/SLBE low quotes rejected, an explanation shall be provided detailing negotiation efforts.
4. If a low bid WMBE/SLBE is rejected or deemed unqualified the contractor must provide an explanation and supporting documentation for this decision.
5. Prime shall break down portions of work into economical feasible opportunities for subcontracting. The WMBE/SLBE directory may be useful in identifying additional subcontracting opportunities and firms not listed in the "WMBE/SLBE Goal Setting Firms List."
6. Contractor shall not preclude WMBE/SLBEs from bidding on any part of work, even if the Contractor may desire to self-perform the work.
7. Contractor shall avoid relying solely on subcontracting out work-scope where WMBE/SLBE availability is not sufficient to attain the pre-determined subcontract goal set for the Bid or when targeted sub-consultant participation is stated within the RFP/RFQ.
8. In its solicitations, the Bidder should offer assistance to WMBE/SLBEs in obtaining bonding, insurance, et cetera, if required of subcontractors by the City or Prime Contractor.
9. In its solicitation, the Bidder should offer assistance in obtaining equipment for a specific job to WMBE/SLBEs, if needed.
10. Contractor should use the services offered by such agencies as the City of Tampa Minority and Small Business Development Office, Hillsborough County Entrepreneur Collaborative Center, Hillsborough County Economic Development Department's MBE/SBE Program and the NAACP Empowerment Center to name a few for the recruitment and placement of WMBEs/SLBEs.





**Failure to Complete, Sign and Submit Both Forms 10 & 20 SHALL render the Bid or Proposal Non-Responsive**

**Page 1 of 4 – DMI Solicited/Utilized Schedules**  
**City of Tampa – Schedule of All Solicited Sub-(Contractors/Consultants/Suppliers)**  
**(FORM MBD-10)**

Contract No.: \_\_\_\_\_ Contract Name: \_\_\_\_\_  
Company Name: \_\_\_\_\_ Address: \_\_\_\_\_  
Federal ID: \_\_\_\_\_ Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

Check applicable box(es). Detailed Instructions for completing this form are on page 2 of 4.

No Firms were contacted or solicited for this contract.

No Firms were contacted because: \_\_\_\_\_

See attached list of additional Firms solicited and all supplemental information (List must comply to this form)

Note: Form MBD-10 must list ALL subcontractors solicited including Non-minority/small businesses

NIGP Code Categories: Buildings = 909, General = 912, Heavy = 913, Trades = 914, Architects = 906, Engineers & Surveyors = 925, Supplier = 912-77

S = SLBE W=WMBE O = Neither	Company Name Address Phone, Fax, Email	Type of Ownership (F=Female M=Male) BF BM = African Am. HF HM = Hispanic AF AM = Asian Am. NF NM = Native Am. CF CM = Caucasian	Trade or Services  NIGP Code (listed above)	Contact Method L=Letter F=Fax E=Email P=Phone	Quote or Response Received Y/N

Failure to Complete, Sign and Submit  
this form with your Bid or Proposal  
Shall render the Bid Non-Responsive  
(Do Not Modify This Form)

It is hereby certified that the information provided is an accurate and true account of contacts and solicitations for sub-contracting opportunities on this contract.

Signed: \_\_\_\_\_ Name/Title: \_\_\_\_\_ Date: \_\_\_\_\_

**Failure to Complete, Sign and Submit Both Forms 10 & 20 SHALL render the Bid or Proposal Non-Responsive**  
**Forms must be included with Bid / Proposal**



## Instructions for completing The Sub-(Contractors/Consultants/ Suppliers) Solicited Form (Form MBD-10)

**This form must be submitted with all bids or proposals.** All subcontractors (regardless of ownership or size) solicited and subcontractors from whom unsolicited quotations were received must be included on this form. The instructions that follow correspond to the headings on the form required to be completed. Note: Ability or desire to self-perform all work shall not exempt the prime from Good Faith Efforts to achieve participation.

- **Contract No.** This is the number assigned by the City of Tampa for the bid or proposal.
- **Contract Name.** This is the name of the contract assigned by the City of Tampa for the bid or proposal.
- **Contractor Name.** The name of your business and/or doing business as (dba) if applicable.
- **Address.** The physical address of your business.
- **Federal ID. FIN.** A number assigned to your business for tax reporting purposes.
- **Phone.** Telephone number to contact business.
- **Fax.** Fax number for business.
- **Email.** Provide email address for electronic correspondence.
- **No Firms were contacted or solicited for this contract.** Checking the box indicates that a pre-determined Subcontract Goal or Participation Plan Requirement was not set by the City resulting in your business not using subcontractors and will self-perform all work. If during the performance of the contract you employ subcontractors, the City must pre-approve subcontractors. Use of the “Sub-(Contractors/Consultants/Suppliers) Payments” form (MBD Form-30) must be submitted with every pay application and invoice. Note: Certified **SLBE or WMBE firms** bidding as Primes **are not exempt** from outreach and solicitation of subcontractors.
- **No Firms were contacted because.** Provide brief explanation why no firms were contacted or solicited.
- **See attached documents.** Check box, if after you have completed the DMI Form in its entirety, you need more space to list additional firms and/or if you have supplemental information/documentation relating to the form. All DMI data not submitted on the MBD Form-10 must be in the same format and have all requested data from MBD Form-10 included.

The following instructions are for information of any and all subcontractors solicited.

- **“S” = SLBE, “W” = WMBE.** Enter “S” for firms Certified by the City as Small Local Business Enterprises and/or “W” for firms Certified by the City as either Women/Minority Business Enterprise; **“O” = Non-certified others.**
- **Federal ID. FIN.** A number assigned to a business for tax reporting purposes. This information is critical in proper identification and payment of the contractor/subcontractor.
- **Company Name, Address, Phone & Fax.** Provide company information for verification of payments.
- **Type of Ownership.** Indicate the Ethnicity and Gender of the owner of the subcontracting business.
- **Trade, Services, or Materials** indicate the trade, service, or materials provided by the subcontractor. NIGP codes aka “National Institute of Governmental Purchasing” are listed at top section of document.
- **Contact Method L=letter, F=fax, E=Email, P=Phone.** Indicate with letter the method(s) of soliciting for bid.
- **Quote or Resp. (response) Rec’d (received) Y/N.** Indicate “Y” Yes if you received a quotation or if you received a response to your solicitation. Indicate “N” No if you received no response to your solicitation from the subcontractor. Must keep records: log, ledger, documentation, etc. that can validate/verify.

If additional information is required or you have questions, please contact the Equal Business Opportunity Program - Minority and Small Business Development Office at (813) 274-5522.



**Failure to Complete, Sign and Submit Both Forms 10 & 20 SHALL render the Bid or Proposal Non-Responsive**

**Page 3 of 4 – DMI Solicited/Utilized Schedules**  
**City of Tampa – Schedule of All To-Be-Utilized Sub-(Contractors/Consultants/Suppliers)**  
**(FORM MBD-20)**

Contract No.: \_\_\_\_\_ Contract Name: \_\_\_\_\_  
Company Name: \_\_\_\_\_ Address: \_\_\_\_\_  
Federal ID: \_\_\_\_\_ Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

Check applicable box(es). Detailed Instructions for completing this form are on page 4 of 4.

See attached list of additional Firms Utilized and all supplemental information (List must comply to this form)

Note: Form MBD-20 must list ALL subcontractors To-Be-Utilized including Non-minority/small businesses

No Subcontracting/consulting (of any kind) will be performed on this contract.

No Firms are listed to be utilized because: \_\_\_\_\_

NIGP Code General Categories: Buildings = 909, General = 912, Heavy = 913, Trades = 914, Architects = 906, Engineers & Surveyors = 925, Supplier = 912-77

Enter "S" for firms Certified as Small Local Business Enterprises, "W" for firms Certified as Women/Minority Business Enterprise, "O" for Other Non-Certified

S = SLBE W=WMBE O =Neither	Company Name Address Phone, Fax, Email	Type of Ownership (F=Female M=Male) BF BM = African Am. HF HM = Hispanic Am. AF AM = Asian Am. NF NM = Native Am. CF CM = Caucasian	Trade, Services, or Materials  NIGP Code Listed above	\$ Amount of Quote. Letter of Intent (LOI) if available	Percent of Scope or Contract %

Failure to Complete, Sign and Submit  
this form with your Bid or Proposal  
Shall render the Bid Non-Responsive.  
(Do Not Modify This Form)

Total ALL Subcontract / Supplier Utilization \$ \_\_\_\_\_  
Total SLBE Utilization \$ \_\_\_\_\_  
Total WMBE Utilization \$ \_\_\_\_\_  
Percent SLBE Utilization of Total Bid/Proposal Amt. \_\_\_\_\_% Percent WMBE Utilization of Total Bid/Proposal Amt. \_\_\_\_\_%

It is hereby certified that the following information is a true and accurate account of utilization for sub-contracting opportunities on this Contract.

Signed: \_\_\_\_\_ Name/Title: \_\_\_\_\_ Date: \_\_\_\_\_

**Failure to Complete, Sign and Submit Both Forms 10 & 20 SHALL render the Bid or Proposal Non-Responsive**  
**Forms must be included with Bid / Proposal**



## Page 4 of 4 DMI – Solicited/**Utilized**

### Instructions for completing **The Sub-(Contractors/Consultants/ Suppliers) to be Utilized Form (Form MBD-20)**

**This form must be submitted with all bids or proposals. All subcontractors (regardless of ownership or size) projected to be utilized must be included on this form.** Note: Ability or desire to self-perform all work shall not exempt the prime from Good Faith Efforts to achieve participation.

**Contract No.** This is the number assigned by the City of Tampa for the bid or proposal.

- **Contract Name.** This is the name of the contract assigned by the City of Tampa for the bid or proposal.
- **Contractor Name.** The name of your business and/or doing business as (dba) if applicable.
- **Address.** The physical address of your business.
- **Federal ID. FIN.** A number assigned to your business for tax reporting purposes.
- **Phone.** Telephone number to contact business.
- **Fax.** Fax number for business.
- **Email.** Provide email address for electronic correspondence.
- **No Subcontracting/consulting (of any kind) will be performed on this contract.** Checking box indicates your business will not use subcontractors when no Subcontract Goal or Participation Plan Requirement was set by the City, but will self-perform all work. When subcontractors are utilized during the performance of the contract, the “Sub-(Contractors/Consultants/Suppliers) Payments” form (MBD Form-30) must be submitted with every pay application and invoice. Note: certified **SLBE or WMBE firms** bidding as Primes **are not exempt** from outreach and solicitation of subcontractors, including completion and submitting Form-10 and Form-20.
- **No Firms listed To-Be-Utilized.** Check box; provide brief explanation why no firms were retained when a goal or participation plan requirement was set on the contract. Note: mandatory compliance with Good Faith Effort outreach (GFECF) requirements applies (MBD Form-50) and supporting documentation must accompany the bid.
- **See attached documents.** Check box, if after completing the DMI Form in its entirety, you need more space to list additional firms and/or if you have supplemental information/documentation relating to the scope/value/percent utilization of subcontractors. Reproduce copies of MBD-20 and attach. All data not submitted on duplicate forms must be in the same format and content as specified in these instructions.

The following instructions are for information of Any and All subcontractors To Be Utilized.

- **Federal ID. FIN.** A number assigned to a business for tax reporting purposes. This information is critical in proper identification of the subcontractor.
- **“S” = SLBE, “W” = WMBE.** Enter “S” for firms Certified by the City as Small Local Business Enterprises and/or “W” for firms Certified by the City as Women/Minority Business Enterprise; **“O” = Non-certified others.**
- **Company Name, Address, Phone & Fax.** Provide company information for verification of payments.
- **Type of Ownership.** Indicate the Ethnicity and Gender of the owner of the subcontracting business.
- **Trade, Services, or Materials (NIGP code if Known)** Indicate the trade, service, or material provided by the subcontractor. Abbreviated list of NIGP is available at <http://www.tampagov.net/mbd> “Information Resources”.
- **Amount of Quote, Letters of Intent** (required for both SLBEs and WMBEs).
- **Percent of Work/Contract.** Indicate the percent of the total contract price the subcontract(s) represent. For CCNA only (i.e. Consultant A/E Services) you must indicate subcontracts as percent of total scope/contract.
- **Total Subcontract/Supplier Utilization.** – Provide total dollar amount of all subcontractors/suppliers projected to be used for the contract. (Dollar amounts may be optional in CCNA depending on solicitation format).
- **Total SLBE Utilization.** Provide total dollar amount for all projected SLBE subcontractors/Suppliers used for this contract. (Dollar amounts may be optional in CCNA proposals depending on the solicitation format).
- **Total WMBE Utilization.** Provide total dollar amount for all projected WMBE subcontractors/Suppliers used for this contract. (Dollar amounts may be optional in CCNA proposals depending on the solicitation format).
- **Percent SLBE Utilization.** Total amount allocated to SLBEs divided by the total bid/proposal amount.
- **Percent WMBE Utilization.** Total amount allocated to WMBEs divided by the total bid/proposal amount.

If additional information is required or you have questions, please contact the Equal Business Opportunity Program - Minority and Small Business Development Office at (813) 274-5522.

TAMPA BID BOND  
Contract 20-C-00039; Armenia Avenue at Busch Boulevard Intersection Improvements

KNOW ALL MEN BY THESE PRESENTS, that we, \_\_\_\_\_

\_\_\_\_\_  
(hereinafter called the Principal) and \_\_\_\_\_

(hereinafter called the Surety) a Corporation chartered and existing under the laws of the State of \_\_\_\_\_, with its principal offices in the City of \_\_\_\_\_, and authorized to do business in the State of Florida, are held and firmly bound unto the City of Tampa, a Municipal Corporation of Hillsborough County, Florida, in the full and just sum of 5% of the amount of the (Bid) (Proposal) good and lawful money of the United States of America, to be paid upon demand of the City of Tampa, Florida, to which payment will and truly to be made we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally and firmly these presents.

WHEREAS, the Principal is about to submit, or has submitted to the City of Tampa, Florida, a Proposal for the construction of certain facilities for the City designated Contract 20-C-00039, Armenia Avenue at Busch Boulevard Intersection Improvements.

WHEREAS, the Principal desires to file this Bond in accordance with law, in lieu of a certified Bidder's check otherwise required to accompany this Proposal.

NOW, THEREFORE: The conditions of this obligation are such that if the Proposal be accepted, the Principal shall, within twenty (20) days after the date of receipt of written Notice of Award, execute a contract in accordance with the Proposal and upon the terms, conditions and price set forth therein, in the form and manner required by the City of Tampa, Florida and execute a sufficient and satisfactory Public Construction Bond payable to the City of Tampa, Florida in an amount of one hundred percent (100%) of the total contract price, in form and with security satisfactory to said City, then this Bid Bond obligation is to be void; otherwise to be and remain in full force and virtue in law, and the Surety shall, upon failure of the Principal to comply with any or all of the foregoing requirements within the time specified above, immediately pay to the aforesaid City, upon demand, the amount thereof, in good and lawful money of the United States of America, not as a penalty, but as liquidated damages.

IN TESTIMONY THEREOF, the Principal and Surety have caused these presents to be duly signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Principal

\_\_\_\_\_

BY \_\_\_\_\_

TITLE \_\_\_\_\_

BY \_\_\_\_\_

TITLE \_\_\_\_\_

(SEAL)

\_\_\_\_\_  
Producing Agent

\_\_\_\_\_  
Producing Agent's Address

\_\_\_\_\_  
Name of Agency

\_\_\_\_\_  
The addition of such phrases as "not to exceed" or like import shall render the (Bid) (Proposal) non-responsive.

AGREEMENT

For furnishing all labor, materials and equipment, together with all work incidental thereto, necessary and required for the performance of the work for the construction of Contract 20-C-00039 in accordance with your Proposal dated \_\_\_\_\_, amounting to a total of \$ \_\_\_\_\_ as completed in accordance with subsections I-2.09 and I-2.10 of the Instruction to Bidders.

This AGREEMENT, made and entered into in triplicate, between the City of Tampa, Florida, hereinafter called the City, and \_\_\_\_\_ hereinafter called the Contractor, as of the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_ when the City Council of the City of Tampa, Florida adopted a Resolution authorizing, among other things, the Mayor's execution of this Agreement.

WITNESSETH that, in consideration of the mutual stipulations, agreements, and covenants herein contained, the parties hereto have agreed and hereby agree with each other, the Party of the First Part for itself, its successors and assigns, and the Party of the Second Part for itself, or himself, or themselves, and its successors and assigns, or his or their executors, administrators and assigns, as follows:

Contract 20-C-00039; Armenia Avenue at Busch Boulevard Intersection Improvements, shall include, but not be limited to, Work shall include, but not be limited to, maintenance of traffic, roadway construction, signing and pavement markings, signalization, utilities adjustments/relocations and all associated work required for a complete project in accordance with the contract. with all associated work required for a complete project in accordance with the Contract Documents.

Contract Documents referred to in Article 1.01 of this Agreement also includes this volume, applicable standard drawings, the plans and any provisions referred to whether actually attached or not.

# TAMPA AGREEMENT

## SECTION 1 GENERAL

### ARTICLE 1.01 THE CONTRACT

Except for titles, subtitles, headings, running headlines, and tables of contents (all of which are printed herein merely for convenience), the following, except for such portions thereof as may be specifically excluded, constitute the Contract:

The Notice to Bidders;  
The Instructions to Bidders, including Special Instructions and General Instructions;  
The Proposal;  
The Bid Bond;  
The Certification of Nonsegregated Facilities;  
The Notice of Award;  
The Agreement;  
The Performance Bond;  
The Notice To Proceed;  
The Specifications, including the General Provisions, the Workmanship and Materials, the Specific Provisions or the Contract Items  
The Plans;  
All Supplementary Drawings Issued after award of the Contract;  
All Addenda issued by the City prior to the receipt of proposals;  
All provisions required by law to be inserted in this Contract, whether actually inserted or not.

### ARTICLE 1.02 DEFINITIONS

The following words and terms, or pronouns used in their stead, shall, wherever they appear in this Contract, be construed as follows, unless different meaning is clear from the context:

(a)"City" shall mean the City of Tampa, Florida, represented by its Mayor and City Council, Party of the First Part, or such other City official as shall be duly empowered to act for the City on matters relating to this Contract.

(b)"Contractor" shall mean the Party of the Second Part hereto, whether corporation, firm or individual, or any combination thereof, and its, their, or his successors, personal representatives, executors, administrators, and assigns, and any person, firm or corporation who or which shall at any time be substituted in the place of the Party of the Second Part under this Contract.

(c)"Engineer" shall mean the Director of the Department or his duly authorized representative.

(d)"Consultant" shall mean the engineering or architectural firm or individual employed by the City to consult with and advise the City in the construction of the project.

(e)"Surety" shall mean any person, firm or corporation that has executed as Surety the Contractor's Performance Bond securing the performance of this Contract.

(f)"The Work" shall mean everything expressly or implied required to be furnished and done by the Contractor under the Contract, and shall include both Contract Work

and Extra Work.

(g)"Contract Work" shall mean everything expressly or implied required to be furnished and done by the Contractor by any one or more of the Contract parts referred to in Article 1.01 hereof, except Extra Work, as hereinafter defined; it being understood that, in case of any inconsistency in or between any part or parts of this Contract, the Engineer shall determine which shall prevail.

(h)"Contract" or "Contract Documents" shall mean each of the various part of the Contract referred to in Article 1.01 hereof, both as a whole and severally.

(i)"Extra Work" shall mean work other than that required either expressly or implied by the contract in its present form.

(j)"Plans" shall mean only those drawings specifically referred to as such in these documents, or in any Addendum. Drawings issued after the execution of the Contract to explain further, or to illustrate, or to show changes in the work, will be known as "Supplementary Drawings" and shall be binding upon the Contractor with the same force as the Plans.

(k)"Specifications" shall mean all of the directions, requirements, and standards of performance applying to the work, as hereinafter detailed and designated as such, or which may be issued in an addendum.

(l)"Addendum or Addenda" shall mean the additional contract provisions issued in writing prior to the receipt of bids.

(m)"Notice" shall mean written notice. Notice shall be served upon the Contractor, either personally or by leaving the said notice at his residence or with any employee found on the work, or addressed to the Contractor at the residence or place of business given in his proposal and deposited in a postpaid wrapper in any post office box regularly maintained by the United States Post Office.

(n)"Project" shall mean the entire improvement package or related work. The "project" may consist of several different, but related, contracts.

(o)"Site" shall mean, and be limited to, the area upon or in which the Contractor's operations are carried on and such other appropriate areas as may be designed as such by the Engineer.

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

(q)Whenever in the Contract the words "directed", "required", "permitted", "ordered", "designated", "prescribed", and words of like import are used, they shall imply the direction, requirement, permission, order, designation, or prescription of the Engineer; and "approved", "acceptable", "satisfactory", "in the judgement of", and words of like import shall mean approved by, or acceptable to, or satisfactory to, or in the judgment of the Engineer.

(r)Whenever in the Contract the word "day" is used, it shall mean calendar day.

(s)"Final Acceptance" shall mean acceptance of the

work as evidenced by an official resolution of the City. Such acceptance shall be deemed to have taken place only if and when an approving resolution has been adopted by the City Council. The final acceptance shall be signed only after the City has assured itself by tests, inspection, or otherwise, that all of the provisions of the Contract have been carried out to its satisfaction.

(t)"Eastern Standard Time" shall be construed as the time being observed in the City on the day proposals are received or other documents issued or signed.

## **SECTION 2 POWERS OF THE CITY'S REPRESENTATIVES**

### **ARTICLE 2.01 THE ENGINEER**

It is covenanted and agreed that the Engineer, in addition to those matters elsewhere herein expressly made subject to his determination, direction, or approval, shall have the power, subject to such express provisions and limitations herein contained as are not in conflict herewith, and subject to review by the Mayor and City Council:

(a)To monitor the performance of the work.

(b)To determine the amount, kind, quality, sequence, and location of the work to be paid for hereunder and, when completed, to measure such work for payment.

(c)To determine all questions of an engineering character in relation to the work, to interpret the Plans, Specifications and Addenda.

(d)To determine how the work of this Contract shall be coordinated with the work of other contractors engaged simultaneously on this project.

(e)To make minor changes in the work as he deems necessary, provided such changes do not result in a net increase in the cost to the City or to the Contractor of the work to be done under the Contract.

(f)To amplify the Plans, add explanatory information and furnish additional Specifications and Drawings consistent with the intent of the Contract Documents.

The power of the Engineer shall not be limited to the foregoing enumeration, for it is the intent of this Contract that all of the work shall be subject to his determinations and approval, except where the determination or approval of someone other than the Engineer is expressly called for herein and except as subject to review by the Mayor and City Council. All orders of the Engineer requiring the Contractor to perform work as Contract work shall be promptly obeyed by the Contractor.

The Engineer shall not, however, have the power to issue an extra work order, and the performance of such work on the order of the Engineer without previously obtaining written confirmation thereof from the Mayor in accordance with Article 7.02 hereof may constitute a waiver of any right to extra compensation therefor. The Contractor is warned that the Engineer has no power to change the terms and provisions of this Contract, except minor changes where such change results in no net increase in the Contract Price.

### **ARTICLE 2.02 DIRECTOR**

The Director of the Department in addition to those matters

expressly made subject to his determination, direction or approval in his capacity as "Engineer", shall also have the power:

(a)To review any and all questions in relation to this Contract and its performance, except as herein otherwise specifically provided, and his determination upon such review shall be final and conclusive upon the Contractor.

(b)With the approval of the Mayor and City Council to authorize modifications or changes in the Contract so as to require: (1) the performance of extra work, or (2) the omission of Contract work whenever he deems it in the interest of the City to do so, or both.

(c)To suspend the whole or any part of the work whenever, in his judgment, such suspension is required: (1) in the interest of the City generally, or (2) to coordinate the work of the various Contractors engaged on this project, or (3) to expedite the completion of the entire project, even though the completion of this particular Contract may be thereby delayed, without compensation to the Contractor for such suspension other than extending the time for the completion of the work, as much as it may have been, in the opinion of the City, delayed by such a suspension.

(d)If, before the final acceptance of all the work contemplated herein, it shall be deemed necessary to take over, use, occupy, or operate any part of the completed or partly completed work, the Engineer shall have the right to do so and the Contractor will not, in any way, interfere with or object to the use, occupation, or operation of such work by the City after receipt of notice in writing from the Engineer that such work or part thereof will be used by the City on and after the date specified in such notice. Such taking over, use, occupancy or operation of any part of the completed or partially completed work shall not constitute final acceptance or approval of any such part of the work.

### **ARTICLE 2.03 NO ESTOPPEL**

The City shall not, nor shall any department, officer, agent, or employee thereof, be bound, precluded, or estopped by any determination, decision, acceptance, return, certificate, or payment made or given under or in connection with this Contract by any officer, agent or employee of the City at any time either before or after final completion and acceptance of the work and payment therefor: (a) from showing the true and correct classification, amount, quality, or character of the work done, or that any determination, decision, acceptance, return certificate or payment is untrue, incorrect or improperly made in any particular, or that the work or any part thereof does not in fact conform to the requirements of the Contract Documents, and (b) from demanding and recovering from the Contractor any overpayments made to him or such damages as it may sustain by reason his failure to comply with the requirements of the Contract of Documents, or both.

### **ARTICLE 2.04 NO WAIVER OF RIGHTS**

Neither the inspection, nor any order, measurements or certificate of the City or its employees, officers, or agents, nor by any order of the City for payment of money, nor any money, nor payments for or acceptance of the whole or any part of the work by the City, nor any extension of time, nor any changes in the Contract, Specifications or Plans, nor any possession by the City or its employees shall operate as a



waiver of any provisions of this Contract, nor any power herein provided nor shall any waiver of any breach of this Contract be held as a waiver of any other subsequent breach.

Any remedy provided in this Contract shall be taken and construed as cumulative, namely, in addition to each and every other suit, action, or legal proceeding. The City shall be entitled as of right to an injunction against any breach of the provisions of this Contract.

### **SECTION 3 PERFORMANCE OF WORK**

#### **ARTICLE 3.01 CONTRACTOR'S RESPONSIBILITY**

The Contractor shall do all the work and furnish, at his own cost and expense, all labor, materials, equipment, and other facilities, except as herein otherwise provided, as may be necessary and proper for performing and completing the work under this Contract. The Contractor shall be responsible for the entire work until completed and finally accepted by the City.

The work shall be performed in accordance with the true intent and meaning of the Contract Documents. Unless otherwise expressly provided, the work must be performed in accordance with the best modern practice, with materials as specified and workmanship of the highest quality, all as determined by and entirely to the satisfaction of the Engineer.

Unless otherwise expressly provided, the means and methods of construction shall be such as the Contractor may choose, subject, however, to the approval of the Engineer. Only adequate and safe procedure, methods, structures and equipment shall be used. The Engineer's approval or the Engineer's failure to exercise his right thereon shall not relieve the Contractor of obligations to accomplish the result intended by the Contract, nor shall such create a cause of action for damages.

#### **ARTICLE 3.02 COMPLIANCE WITH LAWS**

The Contractor must comply with all local, State and Federal laws, rules, ordinances and regulations applicable to this Contract and to the work done hereunder, and must obtain, at his own expense, all permits, licenses or other authorization necessary for the prosecution of the work.

No work shall be performed under this Contract on Sundays, legal holidays or after regular working hours without the express permission of the Engineer. Where such permission is granted, the Engineer may require that such work be performed without additional expense to the City.

#### **ARTICLE 3.03 INSPECTION**

During the progress of the work and up to the date of final acceptance, the Contractor shall, at all times, afford the representatives of the City, the Florida Department of Environmental Regulation, and if applicable, the Federal Environmental Protection Agency and the Federal Department of Labor every reasonable, safe and proper facility for inspecting the work done or being done at the

site. The inspection of any work shall not relieve the Contractor of any of his obligations to perform proper and satisfactory work as herein specified. Finished or unfinished work found not to be in strict accordance with the Contract shall be replaced as directed by the Engineer, even though such work may have been previously approved and payment made therefor.

The City shall have the right to reject materials and workmanship which are defective or require their correction. Rejected work and materials must be promptly removed from the site, which must at all times be kept in a reasonably clean and neat condition.

Failure or neglect on the part of the City to condemn or reject bad or inferior work or materials shall not be construed to imply an acceptance of such work or materials, if it becomes evident at any time prior to the final acceptance of the work by the City. Neither shall it be construed as barring the City at any subsequent time from the recovery of damages of such a sum of money as may be needed to build anew all portions of the work in which inferior work or improper materials were used, wherever found.

Should it be considered necessary or advisable by the City at any time before final acceptance of the entire work to make examinations of work already completed, by removing or tearing out all or portions of such work, the Contractor shall, on request, promptly furnish all necessary facilities, labor, and material for that purpose. If such work is found to be defective in any material respect, due to the fault of the Contractor or his subcontractors, he shall defray all expenses of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the cost of examination and restoration of the work shall be considered an item of extra work to be paid for in accordance with the provisions of Article 7.02 hereof.

#### **ARTICLE 3.04 PROTECTION**

During performance and until final acceptance, the Contractor shall be under an absolute obligation to protect the finished and unfinished work against any damage, loss, or injury. The Contractor shall take proper precaution to protect the finished work from loss or damage, pending completion and the final acceptance of all the work included in the entire Contract, provided that such precaution shall not relieve the Contractor from any and all liability and responsibility for loss or damage to the work occurring before final acceptance by the City. Such loss or damage shall be at the risk of and borne by the Contractor, whether arising from acts or omissions of the Contractor or others. In the event of any such loss or damage, the Contractor shall forthwith repair, replace, and make good the work without extension of time therefor, except as may be otherwise provided herein.

The provisions of this Article shall not be deemed to create any new right of action in favor of third parties against the Contractor or the City.

#### **ARTICLE 3.05 PRESERVATION OF PROPERTY**

The Contractor shall preserve from damage all property along the line of the work, or which is in the vicinity of or is in anywise affected by the work, the removal or destruction of which is not called for by the Plans. This applies, but is not limited, to the public utilities, trees, lawn areas, building monuments, fences, pipe and underground structures, public streets (except natural wear and tear of streets resulting from legitimate use thereof by the Contractor), and wherever such property is damaged due to the activities of the Contractor, it shall be immediately restored to its original condition by the Contractor and at his own expense.

In case of failure on the part of the Contractor to restore such property, or make good such damage or injury, the City may, upon forty-eight (48) hour written notice, proceed to repair, rebuild, or otherwise restore such property as may be deemed necessary, and the cost thereof will be deducted from any monies due or which may become due the Contractor under this Contract. Nothing in this clause shall prevent the Contractor from receiving proper compensation for the removal, damage, or replacement of any public or private property not shown on the Plans, when this is made necessary by alteration of grade or alignment authorized by the Engineer, provided that such property has not been damaged through fault of the Contractor, his employees or agents.

**ARTICLE 3.06 BOUNDARIES**

The Contractor shall confine his equipment, apparatus, the storage of materials, supplies and apparatus of his workmen to the limits indicated on the plans, by law, ordinances, permits or direction of the Engineer.

**ARTICLE 3.07 SAFETY AND HEALTH REGULATIONS**

The Contractor shall comply with the Department of Labor Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (PL 91- 596) and under Section 107 of the Contract Work Hours and Safety Standards Act (PL91-54).

**ARTICLE 3.08 TAXES**

All taxes of any kind and character payable on account of the work done and materials furnished under this Contract shall be paid by the Contractor and shall be deemed to have been included in his bid. The laws of the State of Florida provide that sales and use taxes are payable by the Contractor upon the tangible personal property incorporated in the work and such taxes shall be paid by the Contractor and shall be deemed to have been included in his bid.

**ARTICLE 3.09 ENVIRONMENTAL CONSIDERATIONS**

The Contractor, in the performance of the work under this Contract, shall comply with all Local, State and Federal laws, statutes, ordinances, rules and regulations applicable to protection of the environment; and, in the event he violates any of the provisions of same, he shall be answerable to the Local, State and Federal agencies designated by law to protect the environment. In the event the City receives, from any of the environmental agencies, a citation which is occasioned by an act or omission of the Contractor or his

subcontractor or any officers, employees or agents of either, it is understood and agreed that the Contractor shall automatically become a party-respondent under said citation; and the City immediately shall notify the Contractor and provide him with a copy of said citation.

The Contractor shall comply with the requirements of the citation and correct the offending conditions(s) within the time stated in said citation and further shall be held fully responsible for all fines and/or penalties.

**SECTION 4  
TIME PROVISIONS**

**ARTICLE 4.01 TIME OF START AND COMPLETION**

The Contractor must commence work within thirty (30) days subsequent to the date of the receipt of the "Notice to Proceed" by the City unless otherwise provided in the Specific Provisions and Special Instructions. Time being of the essence of this Contract, the Contractor shall thereafter prosecute the work diligently, using such means and methods of construction as well as secure its full completion in accordance with the requirements of the Contract Documents no later than the date specified therefor, or on the date to which the time for completion may be extended.

The Contractor must complete the work covered by this Contract in the number of consecutive calendar days set forth in the Instructions to Bidders, unless the date of completion is extended pursuant to the provisions of Article 4.05 hereof.

The period for performance shall start from the date of signing of this Agreement by the City.

The actual date of completion will be established after a final inspection as provided in Article 4.07 hereof.

**ARTICLE 4.02 PROGRESS SCHEDULE**

To enable the work to be laid out and prosecuted in an orderly and expeditious manner, the Contractor shall submit to the Engineer a proposed progress schedule within fifteen (15) days after the award of this Contract.

The schedule shall state the Contract starting date, time for completion and date of completion and shall show the anticipated time of starting and completion of each of the various operations to be performed under this Contract, together with all necessary and appropriate information regarding sequence and correlation of work and an estimated time required for the delivery of all materials and equipment required for the work. The proposed schedule shall be revised as directed by the Engineer until finally approved by him, and, after such approval, shall be strictly adhered to by the Contractor. The approved progress schedule may be changed only with the written permission of the Engineer.

If the Contractor shall fail to adhere to the approved progress schedule or the schedule as revised, he shall promptly adopt such other or additional means and methods of construction as will make up for the time lost, and will assure completion in accordance with the contract time.

**ARTICLE 4.03 APPROVAL REQUESTS**

From time to time, as the work progresses and in the sequence indicated by the approved schedule, the Contractor must submit to the Engineer a specific request, in writing, for each item of information or approval required of him by the Contract. These requests must be submitted sufficiently in advance of the date upon which the information or approval is actually required by the Contractor to allow for the time the Engineer may take to act upon such submissions or resubmissions. The Contractor shall not have any right to an extension of time on account of delays due to his failure to submit his requests for the required information or the required approval in accordance with these requirements.

**ARTICLE 4.04 COORDINATION WITH OTHER CONTRACTORS**

During progress of the work, other Contractors may be engaged in performing other work on this project or on other projects on the site. In that event, the Contractor shall coordinate the work to be done hereunder with the work of such other Contractors in such manner as the Engineer may direct.

**ARTICLE 4.05 EXTENSION OF TIME**

If such an application is made, the Contractor shall be entitled to an extension of time for delay in completion of the work should the Contractor be obstructed or delayed in the commencement, prosecution or completion of any part of said work by any act or delay of the City, or by acts or omissions of other Contractors on this project, or by a riot, insurrection, war, pestilence, acts of public authorities, fire, lightning, hurricanes, earthquakes, tornadoes, floods, extremely abnormal and excessive inclement weather as indicated by the records of the local weather bureau for a five-year period preceding the date of the Contract, or by strikes, or other causes, which causes of delay mentioned in this Article, in the opinion of the City, are entirely beyond the expectation and control of the Contractor.

The Contractor shall, however, be entitled to an extension of time for such causes only for the number of days of delay which the City may determine to be due solely to such causes and only to the extent that such occurrences actually delay the completion of the project and then only if the Contractor shall have strictly complied with all of the requirements of Articles 4.01, 4.02, 4.03 and 4.04 hereof. It is hereby understood that the determination by the Engineer as to the order and sequence of the work shall not in itself constitute a basis for extension of time.

The determination made by the City on an application for an extension of time shall be binding and conclusive on the Contractor.

Delays caused by failure of the Contractor's materialmen, manufacturers, and dealers to furnish approved working drawings, materials, fixtures, equipment, appliances, or other fittings on time or failure of subcontractors to perform their work shall not constitute a basis of extension of time.

The Contractor agrees to make no claim for damages for delay in the performance of this Contract occasioned by any

act or omission to act of the City or any of its representatives or because of any injunction which may be brought against the City or its representatives and agrees that any such claim shall be fully compensated for by an extension of time to complete performance of the work as provided herein.

**ARTICLE 4.06 LIQUIDATED DAMAGES**

It is mutually agreed between the parties that time is the essence of this Contract and that there will be on the part of the City considerable monetary damage in the event the Contractor should fail to complete the work within the time fixed for completion in the Contract or within the time to which such completion may have been extended.

The amount per day set forth in the Instructions to Bidders is hereby agreed upon as the liquidated damages for each and every calendar day that the time consumed in completing the work under this Contract exceeds the time allowed.

This amount shall, in no event, be considered as a penalty or otherwise than as the liquidated and adjusted damages to the City because of the delay and the Contractor and his Surety agree that the stated sum per day for each such day of delay shall be deducted and retained out of the monies which may become due hereunder and if not so deductible, the Contractor and his Surety shall be liable therefor.

**ARTICLE 4.07 FINAL INSPECTION**

When the work has been completed in accordance with the requirements of the Contract and final cleaning up performed, a date for final inspection of the work by the Engineer shall be set by the Contractor in a written request therefor, which date shall be not less than ten (10) days after the date of such request. The work will be deemed complete as of the date so set by the Contractor if, upon such inspection, the Engineer determines that no further work remains to be done at the site.

If such inspection reveals interms of work still to be performed, however, the Contractor shall promptly perform them and then request a reinspection. If, upon such inspection, the Engineer determines that the work is complete, the date of final completion shall be deemed to be the last day of such reinspection.

**SECTION 5  
SUBCONTRACTS AND ASSIGNMENTS**

**ARTICLE 5.01 LIMITATIONS AND CONSENT**

The Contractor shall not assign, transfer, convey, sublet or otherwise dispose of this Contract or of his right, title, or interest therein, or his power to execute such Contract, or to assign any monies due or to become due thereunder to any other person, firm or corporation unless the previous written consent of the City shall first be obtained thereto and the giving of any such consent to a particular subcontract or assignment shall not dispense with the necessity of such consent to any further or other assignment.

Before making any subcontract, the Contractor must submit a

written statement to the Engineer, giving the name and address of the proposed contractor, the portion of the work and materials which he is to perform and furnish and any other information tending to prove that the proposed subcontractor has the necessary facilities, skill, integrity, past experience and financial resources to perform the work in accordance with the terms and conditions of this Contract.

If the City finds that the proposed subcontractor is qualified, the Contractor will be notified in writing. The City may revoke approval of any subcontractor when such subcontractor evidences an unwillingness or inability to perform his work in strict accordance with these Contract Documents. Notice of such revocation of approval will be given in writing to the Contractor.

The Contractor will promptly, upon request, file with the City a conformed copy of the subcontract. 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 Contract Documents, insofar as applicable to the work of subcontractors, and to give the Contractor the same power as regards terminating any subcontracts that the City may exercise over the Contractor under provisions of these Contract Documents.

The Contractor shall be required to perform with his own forces at least twenty-five (25) percent of the work, unless written consent to subcontract a greater percentage of the work is first obtained from the City.

**ARTICLE 5.02 RESPONSIBILITY**

The approval by the City of a subcontractor shall not relieve the Contractor of any of his responsibilities, duties, and liabilities hereunder. The Contractor shall be solely responsible to the City for the acts or defaults or omissions of his subcontractor and of such subcontractor's officers, agents, and employees, each of whom shall for all purposes be deemed to be the agent or employee of the Contractor. Nothing contained in the Contract Documents shall create any contractual relationship between any subcontractor and the City.

**SECTION 6  
SECURITY AND GUARANTY**

**ARTICLE 6.01 CONTRACT SECURITY**

The Contractor shall execute and deliver to the City a Performance Bond on the form as provided herein, in an amount at least equal to one hundred (100) percent of the full Contract price, such Bond to be executed by a surety company acceptable to the City. The surety on such Performance Bond shall be a surety company duly authorized to do business in the State of Florida, and the Bond shall be issued or countersigned by a local resident producing agent of such surety company who is a resident of the State of Florida, regularly commissioned and licensed in said State, and satisfactory evidence of the authority of the person or persons executing such Bond shall be submitted with the Bond. The Performance Bond shall serve as security for the faithful performance of this Contract, including

maintenance and guaranty provisions, and for the payment of all persons performing labor and furnishing materials in connection with the Contract. The premiums on the Performance Bond shall be paid by the Contractor.

If, at any time, the City shall become dissatisfied with any surety or sureties then upon the Performance Bond, or if for any other reason such bond shall cease to be adequate security for the City, the Contractor shall, within five days after notice so to do, substitute an acceptable Bond in such form and sum and signed by such other sureties as may be satisfactory to the City. The premiums on such Bond shall be paid by the Contractor. No further partial payments shall be deemed due or shall be made until the new sureties have qualified.

**ARTICLE 6.02 CONTRACTORS INSURANCE**

Insurance required shall be as indicated on Special Instructions pages beginning with "INS-1"

**ARTICLE 6.03 AGAINST CLAIMS AND LIENS**

The City may withhold from the Contractor as much as any approved payments to him as may, in the opinion of the City, be necessary to secure (a) just claims of any persons supplying labor or materials to the Contractor or any of his subcontractors for the work then due and unpaid; (b) loss due to defective work not remedied, or (c) liability, damage, or loss due to injury to persons or damages to the work or property of other contractors, subcontractors, or others, caused by the act or neglect of the Contractor or of any of his subcontractors. The City shall have the right, as agent for the Contractor, to apply any such amounts so withheld in such manner as the City may deem proper to satisfy such claims or to secure such protection. Such application of such money shall be deemed payments for the account of the Contractor.

**ARTICLE 6.04 MAINTENANCE AND GUARANTY**

The Contractor hereby guarantees all the work furnished under this Contract against any defects in workmanship and materials for a period of one year following the date of final acceptance of the work by the City. Under this guarantee, the Contractor hereby agrees to make good, without delay, at his own expense, any failure of any part of the work due to faulty materials or manufacture, construction, or installation, or the failure of any equipment to perform satisfactorily all the work put upon it within the limits of the Contract Documents, and further, shall make good any damage to any part of the work caused by such failure. It is hereby agreed that the Performance Bond shall fully cover all guarantees contained in this Article.

It is also agreed that all warranties, expressed or implied, inure to the benefit of the City and are enforceable by the City.

**SECTION 7  
CHANGES**

**ARTICLE 7.01 MINOR CHANGES**

The City reserves the right to make such additions, deductions, or changes to this Contract from time to time as

it deems necessary and in a manner not materially affecting the substance thereof or materially changing the price to be paid in order to carry out and complete more fully and perfectly the work herein agreed to be done and performed. This Contract shall in no way be invalidated by any such additions, deductions, or changes, and no claim by the Contractor shall be made for any loss of anticipated profits thereby.

Construction conditions may require that minor changes be made in the location and installation of the work and equipment to be furnished and other work to be performed hereunder, and the Contractor when ordered by the Engineer, shall make such adjustments and changes in said locations and work as may be necessary, without additional cost to the City, provided such adjustments and changes do not alter the character, quantity of cost of the work as a whole, and provided further that Plans and Specifications showing such adjustments and changes are furnished to the Contractor by the City within a reasonable time before any work involving such adjustment and changes is begun. The Engineer shall be the sole judge of what constitutes a minor change for which no additional compensation shall be allowed.

#### **ARTICLE 7.02 EXTRA WORK**

The City may at any time by a written order and without notice to the sureties require the performance of such extra work as it may find necessary or desirable. An order for extra work shall be valid only if issued in writing and signed by the Mayor and the work so ordered must be performed by the Contractor.

The amount of compensation to be paid to the Contractor for any extra work as so ordered shall be determined as follows:

(a) By such applicable unit prices, if any, as are set forth in the Proposal; or

(b) If no such unit prices are set forth then by a lump sum or other unit prices mutually agreed upon by the City and the Contractor; or

(c) If no such unit prices are set forth in the Proposal and if the parties cannot agree upon a lump sum or other unit prices then by the actual net cost in money to the Contractor of the extra work performed, which cost shall be determined as follows:

(1) For all labor and foreman in direct charge of the authorized operations, the Contractor shall receive the current local rate of wages to be agreed upon, in writing, before starting such work for each hour that said labor and foremen are actually engaged thereon, to which shall be added an amount equal to 25 percent of the sum thereof which shall be considered and accepted as full compensation for general supervision, FICA taxes, contributions under the Florida Unemployment Compensation Act, insurance, bond, subcontractor's profit and overhead, the furnishing of small tools and miscellaneous equipment used, such as picks, shovels, hand pumps, and similar items.

(2) For all materials used, the Contractor shall receive the actual cost of such materials delivered at the site or previously approved delivery point as established by original receipted bills. No percentage shall be added to this cost.

(3) For special equipment and machinery such as power-driven pumps, concrete mixers, trucks, and tractors, or other equipment, required for the economical performance of the authorized work, the Contractor shall receive payment based on the average local area rental price for each item of equipment and the actual time of its use on the work. No percentage shall be added to this sum.

(4) Records of extra work done under this procedure shall be reviewed at the end of each day by the Contractor or his representative and the Engineer. Duplicate copies of accepted records shall be made and signed by both Contractor or his representative and the Engineer, and one copy retained by each.

Request for payment for approved and duly authorized extra work shall be submitted in the same form as Contract work or in the case of work performed under paragraph (c) (1) above upon a certified statement supported by receipted bills. Such statement shall be submitted for the current Contract payment for the month in which the work was done.

#### **ARTICLE 7.03 DISPUTED WORK**

If the Contractor is of the opinion that any work required, necessitated, or ordered violates the terms and provisions of this Contract, he must promptly notify the Engineer, in writing, of his contentions with respect thereto and request a final determination thereof. If the Engineer determines that the work in question is Contract work and not extra work or that the order complained of is proper, he will direct the Contractor to proceed and the Contractor shall promptly comply. In order, however, to reserve his right to claim compensation for such work or damages resulting from such compliance, the Contractor must, within five (5) days after receiving notice of the Engineer's determination and direction, notify the City in writing that the work is being performed or that the determination and direction is being complied with under protest. Failure of the Contractor to notify shall be deemed as a waiver of claim for extra compensation or damages therefor.

Before final acceptance by the City, all matters of dispute must be adjusted to the mutual satisfaction of the parties thereto. Final determinations and decisions, in case any questions shall arise, shall constitute a condition precedent to the right of the Contractor to receive the money therefor until the matter in question has been adjusted.

#### **ARTICLE 7.04 OMITTED WORK**

The City may at any time by a written order and without notice to the sureties require the omission of such Contract work as it may find necessary or desirable.

An order for omission of work shall be valid only if signed by the Mayor and the work so ordered must be omitted by the Contractor. The amount by which the Contract price shall be reduced shall be determined as follows:

(a) By such applicable unit prices, if any, as are set forth in the Contract; or

(b) By the appropriate lump sum price set forth in the Contract; or

(c) By the fair and reasonable estimated cost to the City

of such omitted work as determined by the Engineer and approved by the City.

## **SECTION 8 CONTRACTOR'S EMPLOYEES**

### **ARTICLE 8.01 CHARACTER AND COMPETENCY**

The Contractor and his subcontractors shall employ upon all parts of the work herein contracted for only competent, skillful, and trustworthy workers. Should the Engineer at any time give notice, in writing, to the Contractor or his duly authorized representative on the work that any employee in his opinion is incompetent, unfaithful, disorderly, careless, unobservant of instructions, or in any way a detriment to the satisfactory progress of the work, such employee shall immediately be dismissed and not again allowed upon the site.

### **ARTICLE 8.02 SUPERINTENDENCE**

The Contractor shall give his personal supervision to the faithful prosecution of the work and in case of his absence shall have a competent, experienced, and reliable supervisor or superintendent, acceptable to the Engineer on the site who shall follow without delay all instructions of the Engineer in the prosecution and completion of the work and every part thereof, in full authority to supply workers, material, and equipment immediately. He shall keep on hand at all times copies of the Contract Documents.

### **ARTICLE 8.03 EMPLOYMENT OPPORTUNITIES**

The Contractor shall, in the performance of the work required to be done under this Contract, employ all workers without discrimination regarding race, creed, color, sex or national origin and must not maintain or provide facilities that are segregated on the basis of race, color, creed or national origin.

### **ARTICLE 8.04 RATES OF WAGES**

On federally assisted projects, the rates of wages to be paid under this Contract shall not be less than the rates of wages set forth in Section 12 of this Agreement.

On other projects, no wage rate determination is included. Florida's Prevailing Wage Law (Section 215.19, Florida Statutes) was repealed effective April 25, 1979.

### **ARTICLE 8.05 PAYROLL REPORTS**

The Contractor and each subcontractor shall, if requested to do so, furnish to the Engineer a duly certified copy of his payroll and also any other information required by the Engineer to satisfy him that the provisions of the law as to the hours of employment and rate of wages are being observed.

Payrolls shall be prepared in accordance with instructions furnished by the City and on approved forms. The Contractor shall not carry on his payroll any persons not employed by him. Subcontractor's employees shall be carried only on the payrolls of the employing subcontractor.

## **SECTION 9 CONTRACTOR'S DEFAULT**

### **ARTICLE 9.01 CITY'S RIGHT AND NOTICE**

It is mutually agreed that: (a) if the Contractor fails to begin work when required to do so, or (b) if at any time during the progress of the work it shall appear to the Engineer that the Contractor is not prosecuting the work with reasonable speed, or is delaying the work unreasonably and unnecessarily, or (c) if the force of workmen or quality or quantity of material furnished are not sufficient to insure completion of the work within the specified time and in accordance with the Specifications hereto attached, or (d) if the Contractor shall fail to make prompt payments for materials or labor or to subcontractors for work performed under the Contract, or (e) if legal proceedings have been instituted by others than the City in such manner as to interfere with the progress of the work and may subject the City to peril of litigation or outside claims of (f) if the Contractor shall be adjudged a bankrupt or make an assignment for the benefit of creditors, or (g) if in any proceeding instituted by or against the Contractor an order shall be made or entered granting an extension of time of payment, composition, adjustment, modification, settlement or satisfaction of his debts or liabilities, or (h) if a receiver or trustee shall be appointed for the Contractor or the Contractor's property, or (i) if the Contract or any part thereof shall be sublet without the consent of the City being first obtained in writing, or (j) if this Contract or any right, monies, or claim thereunder shall be assigned by the Contractor, otherwise than as herein specified, or (k) if the Contractor shall fail in any manner of substance to observe the provisions of this Contract, or (l) if any of the work, machinery, or equipment shall be defective, and shall not be replaced as herein provided, or (m) if the work to be done under this Contract shall be abandoned, then such fact or conditions shall be certified by the Engineer and thereupon the City without prejudice to any other rights or remedies of the City, shall have the right to declare the Contractor in default and so notify the Contractor by a written notice, setting forth the ground or grounds upon which such default is declared and the Contractor must discontinue the work, either as a portion of the work or the whole thereof, as directed.

### **ARTICLE 9.02 CONTRACTOR'S DUTY UPON DEFAULT**

Upon receipt of notice that his Contract is in default, the Contractor shall immediately discontinue all further operations on the work or such part thereof, and shall immediately quit the site or such part thereof, leaving untouched all plant, materials, equipment, tools, and supplies.

### **ARTICLE 9.03 COMPLETION OF DEFAULTED WORK**

The City, after declaring the Contractor in default, may then have the work completed or the defective equipment or machinery replaced or anything else done to complete the work in strict accordance with the Contract Documents by such means and in such manner, by Contract with or without public letting, or otherwise, as it may deem advisable,

utilizing for such purpose without additional cost to the City such of the Contractor's plant, materials, equipment, tools, and supplies remaining on the site, and also such subcontractors as it may deem advisable.

The City shall reimburse all parties, including itself, for the expense of such completion, including liquidated damages, if any, and the cost of reletting. The City shall deduct this expense from monies due or to become due to the Contractor under this Contract, or any part thereof, and in case such expense is more than the sum remaining unpaid of the original contract price, the Contractor and his sureties shall pay the amount of such deficiency to the City.

#### **ARTICLE 9.04 PARTIAL DEFAULT**

In case the City shall declare the Contractor in default as to a part of the work only, the Contractor shall discontinue such part, shall continue performing the remainder of the work in strict conformity with the terms of the Contract, and shall in no way hinder or interfere with any other contractor or person whom the City may engage to complete the work as to which the Contractor was declared in default.

### **SECTION 10 PAYMENTS**

#### **ARTICLE 10.01 PRICES**

For the Contractor's complete performance of the work, the City will pay and the Contractor agrees to accept, subject to the terms and conditions hereof, the lump sum prices or unit prices in the Contractor's Proposal and the award made therein, plus the amount required to be paid for any extra work ordered under Article 7.02 hereof, less credit for any work omitted pursuant to Article 7.04 hereof. Under unit price items, the number of units actually required to complete the work under the Contract may be more than stated in the Proposal. The Contractor agrees that no claim will be made for any damages or for loss of profits because of a difference between the quantities of the various classes of work assumed and stated in the Proposal Form as a basis for comparing Proposals and the quantities of work actually performed.

The sum as awarded for any lump sum Contract or lump sum Contract Item shall represent payment in full for all of the various classes of work, including materials, equipment, and labor necessary or required to complete, in conformity with the Contract Document, the entire work shown, indicated or specified under the lump sum Contract or lump sum Contract Item.

The amount as awarded as a unit price for any unit price Contract Item shall represent payment in full for all the materials, equipment, and labor necessary to complete, in conformity with the Contract Documents, each unit of work shown, specified, or required under the said unit price Contract Item.

No payment other than the amount as awarded will be made for any class of work included in a lump sum Contract Item or a unit price Contract Item, unless specific provision is

made therefor in the Contract Documents.

#### **ARTICLE 10.02 SUBMISSION OF BID BREAKDOWN**

Within fifteen (15) days after the execution of this Contract, the Contractor must submit to the Engineer in duplicate an acceptable breakdown of the lump sums and unit prices bid for items of the Contract, showing the various operations to be performed under the Contract, as described in the progress schedule required under Article 4.02 hereof, and the value of each of such operations, the total of such items to equal the total price bid. The Contractor shall also submit such other information relating to the bid prices as may be required and shall revise the bid breakdown as directed. Thereafter, the breakdown may be used for checking the Contractor's applications for partial payments hereunder but shall not be binding upon the City or the Engineer for any purpose whatsoever.

#### **ARTICLE 10.03 REPORTS, RECORDS AND DATA**

The Contractor shall furnish to the Engineer such schedules of quantities and costs, progress schedules, reports, invoices, delivery tickets, estimates, records, and other data as the Engineer may request concerning work performed or to be performed and the materials furnished under the Contract.

#### **ARTICLE 10.04 PAYMENTS BY CONTRACTOR**

The Contractor shall pay (a) for all transportation and utility services not later than the 20th day of the calendar month following that in which such services are rendered, (b) for all materials, tools, and equipment delivered at the site of the project, and the balance of the cost thereof not later than the 30th day following the completion of that part of the work in or on which such materials, tools, and equipment are incorporated or used, and (c) to each of his subcontractors, not later than the 5th day following each payment to the Contractor, the respective amounts allowed the Contractor on account of the work performed by his subcontractors, to the extent of each subcontractor's interest therein; and proof of such payments or releases therefor shall be submitted to the Engineer upon request.

#### **ARTICLE 10.05 PARTIAL PAYMENTS**

On or about the first of each month, the Contractor shall make and certify an estimate, on forms prescribed by the City, of the amount and fair value of the work done, and may apply for partial payment therefor. The Contractor shall revise the estimate as the Engineer may direct. When satisfactory progress has been made, and shows that the value of the work completed since the last payment exceeds one percent (1%) of the total Contract price in amount, the Engineer will issue a certificate that such work has been completed and the value thereof. The City will then issue a voucher to the Contractor in accordance with the following schedule:

#### **FOR CONTRACT AMOUNTS UNDER \$250,000**

(A) In the amount of ninety percent (90%) of the value of the work completed as certified until construction is one hundred percent (100%) complete (operational or beneficial occupancy), the withheld amount may be reduced below ten percent (10%), at the Engineer's option, to only that amount necessary to assure completion.

**FOR CONTRACT AMOUNTS OVER \$250,000**

(A) In the amount of ninety percent (90%) of the value of the work completed as certified until construction is fifty percent (50%) complete.

(B) When the dollar value, as determined by the Engineer, of satisfactorily completed work in place is greater than fifty percent (50%) of the original contract price, vouchers for partial payment will be issued by the City to the Contractor in the amount of one hundred percent (100%) of the value of the work, above 50%, completed as certified for that payment period.

(C) If the Contractor has performed satisfactorily and the work is substantially complete (operational or beneficial occupancy) the withheld amount may be reduced, at the Engineer's option, to only that amount necessary to assure completion.

In addition to the Conditions set forth in (A), (B), and (C) above, payments will always be less any sums that may be retained or deducted by the City under the terms of any of the contract documents and less any sums that may be retained to cover monetary guarantees for equipment, materials or progress performance.

Payment on estimates made on or about the first of the month may be expected on or about the 20th of the month.

Unless specified otherwise in the Contract Items, the delivered cost of equipment and nonperishable materials suitably stored at the site of the work and tested for adequacy may be included in the Contractor's application for partial payment provided, however, that the Contractor shall furnish evidence satisfactory to the City that the Contractor is the unconditional owner and in possession of such materials or equipment. The amount to be paid will be 90 percent of the invoice cost to the Contractor which cost shall be supported by receipted bills within 30 days of the date of payment by the City to the Contractor. Such payment shall not relieve the Contractor from full responsibility for completion of the work and for protection of such materials and equipment until incorporated in the work in a permanent manner as required by the Contract Documents.

Before any payment will be made under this Contract, the Contractor and every subcontractor, if required, shall deliver to the Engineer a written, verified statement, in satisfactory form, showing in detail all amounts then due and unpaid by such Contractor or subcontractor to all laborers, workmen, and mechanics, employed by him under the Contract for the performance of the work at the site thereof, for daily or weekly wages, or to other persons for materials, equipment, or supplies delivered at the site of the work during the period covered by the payment under consideration.

**ARTICLE 10.06 FINAL PAYMENT**

Under determination of satisfactory completion of the work under this Contract as provided in Article 4.07 hereof, the Engineer will prepare the final estimate showing the value of the completed work. This estimate will be prepared within 30 days after the date of completion or as soon thereafter as the necessary measurements and computations can be made.

All prior certificates and estimates, being approximate only, are subject to correction in the final estimate and payment.

When the final estimate has been prepared and certified by Engineer, he will submit to the Mayor and City Council the final certificate stating that the work has been completed and the amount based on the final estimate remaining due to the Contractor. The City will then accept the work as fully completed and will, not later than 30 days after the final acceptance, as defined in Article 1.02, of the work done under this Contract, pay the Contractor the entire amount so found due thereunder after deduction of all previous payments and all percentages and amounts to be kept and retained under provisions of this Contract; provided, however, and it is understood and agreed that, as a precedent to receiving final payment, the Contractor shall submit to the City a sworn affidavit that all bills for labor, service, materials, and subcontractors have been paid and that there are no suits pending in connection with this work. The City, at its option, may permit the Contractor to execute a separate surety bond in a form satisfactory to the City. The surety bond shall be in the full amount of the suit or suits.

Neither the final payment nor any part of the retained percentage shall be paid until the Contractor, if required, shall furnish the City with a complete release from any should remain unsatisfied after all payments are made, the Contractor shall refund to the City all monies which the City may be compelled to pay in discharging such claim, including incidental costs and attorney's fees.

**ARTICLE 10.07 ACCEPTANCE OF FINAL PAYMENT**

The acceptance by the Contractor, or by anyone claiming by or through him, of the final payment shall operate as and shall be a release to the City and every officer and agent thereof from any and all claims and liability to the Contractor for anything done or furnished in connection with the work or project and for any act or neglect of the Contractor or of any others relating to or affecting the work. No payment, however, final or otherwise, shall operate to release the Contractor or his sureties from any obligations under this Contract or the Performance Bond.

**SECTION 11 MISCELLANEOUS PROVISIONS**

**ARTICLE 11.01 CONTRACTOR'S WARRANTIES**

In consideration of, and to induce the award of this contract to him, the Contractor represents and warrants:

- (a) That he is not in arrears to the City upon debt or contract, and he is not a defaulter, as surety, contractor, or otherwise.
- (b) That he is financially solvent and sufficiently experienced and competent to perform the work.
- (c) That the work can be performed as called for by the Contract Documents.
- (d) That the facts stated in his proposal and the information given by him are true and correct in all respects.
- (e) That he is fully informed regarding all the conditions affecting the work to be done and labor and materials to be



furnished for the completion of this Contract, and that his information was secured by personal investigation and research.

**ARTICLE 11.02 PATENTED DEVICES, MATERIAL AND PROCESSES**

It is mutually understood and agreed that Contract prices include all royalties and costs arising from patents, trademarks, and copyrights in any way involved in the work. Whenever the Contractor is required or desires to use any design, device, material, or process covered by letters of patent or copyright, the Contractor shall indemnify and save harmless the City, its officers, agents and employees from any and all claims for infringement by reason of the use of any such patented design, device, tool, material, equipment, or process, to be performed under the Contract, and shall indemnify the said City, its officers, agents, and employees for any costs, expenses, and damages which may be incurred by reason of such infringement at any time during the prosecution or after completion of the work.

**ARTICLE 11.03 SUITS AT LAW**

In case any action at law or suit in equity may or shall be brought against the City or any of its officers, agents, or employees for or on account of the failure, omission, or neglect of the Contractor or his subcontractors, employees, or agents, to do or perform any of the covenants, acts, matters, or things by this Contract undertaken to be done or performed by the Contractor or his subcontractors, employees, or agents, or from any injuries done to property or persons and caused by the negligence or alleged negligence of the Contractor or his subcontractors, employees, or agents, or in any other manner arising out of the performance of this Contract, then the Contractor shall immediately assume and take charge of the defense of such actions or suits in like manner and to all intents and purposes as if said actions or suits have been brought directly against the Contractor, and the Contractor shall also indemnify and save harmless the City, its officers, agents, and employees from any and all loss, cost or damage whatever arising out of such actions or suits, in like manner and to all intents and purposes as if said actions or suits have been brought directly against the Contractor.

The Contractor shall and does hereby assume all liability for and agrees to indemnify the City or its Engineer against any or all loss, costs, damages, and liability for any or by reason of any lien, claims or demands, either for materials purchased or for work performed by laborers, mechanics, and others and from any damages, costs, actions, or causes of action and judgement arising from injuries sustained by mechanics, laborers, or other persons by reason of accidents or otherwise, whether caused by the carelessness or inefficiency or neglect of said Contractor, his subcontractors, agents, employees, workmen or otherwise.

**ARTICLE 11.04 CLAIMS FOR DAMAGES**

If the Contractor shall claim compensation for any damage sustained, other than for extra or disputed work covered by Article 7.02 and 7.03 hereof, by reason of any act or omission of the City, its agents, or any persons, he shall, within five days after sustaining such damage, make and

deliver to the Engineer a written statement of the nature of the damage sustained and of the basis of the claim against the City. On or before the 15th of the month succeeding that in which any damage shall have been sustained, the Contractor shall make and deliver to the Engineer an itemized statement of the details and amounts of such damage, duly verified by the Contractor. Unless such statements shall be made delivered within the times aforesaid, it is stipulated that and all claims for such compensation shall be forfeited and invalidated, and the Contractor shall not be entitled to payment on account of such claims.

**ARTICLE 11.05 NO CLAIMS AGAINST INDIVIDUALS**

No claim whatsoever shall be made by the Contractor against any officer, agent, employee of the City for, or on account of, anything done or omitted to be done in connection with this Contract.

**ARTICLE 11.06 LIABILITY UNAFFECTED**

Nothing herein contained shall in any manner create any liability against the City on behalf of any claim for labor, services, or materials, or of subcontractors, and nothing herein contained shall affect the liability of the Contractor or his sureties to the City or to any workmen or materialsmen upon bond given in connection with this Contract.

**ARTICLE 11.07 INDEMNIFICATION PROVISIONS**

Whenever there appears in this Agreement, or in the other Contract Documents made a part hereof, an indemnification provision within the purview of Chapter 725.06, Laws of Florida, the monetary limitation on the extent of the indemnification under each such provision shall be One Million Dollars or a sum equal to the total Contract price, whichever shall be the greater.

**ARTICLE 11.08 UNLAWFUL PROVISIONS DEEMED STRICKEN**

If this contract contains any unlawful provisions not an essential part of the Contract and which shall not appear to have a controlling or material inducement to the making thereof, such provisions shall be deemed of no effect and shall, upon notice by either party, be deemed stricken from the Contract without affecting the binding force of the remainder.

**ARTICLE 11.09 LEGAL PROVISIONS DEEMED INCLUDED**

Each and every provision of any law and clause required by law to be inserted in this Contract shall be deemed to be inserted herein, and the Contract shall be read and enforced as though it were included herein and if, through mistake or otherwise, any such provision is not inserted or is not correctly inserted, then upon application of either party the Contract shall forthwith be physically amended to make such insertion.

**ARTICLE 11.10 DEATH OR INCOMPETENCY OF CONTRACTOR**

In the event of death or legal incompetency of a Contractor who shall be an individual or surviving member of a contracting firm, such death or adjudication of incompetency

shall not terminate the Contract, but shall act as default hereunder to the effect provided in Article 9.01 hereof and the estate of the Contractor and his surety shall remain liable hereunder to the same extent as though the Contractor had lived. Notice of default, as provided in Article 9.01 hereof, shall not be required to be given in the event of such death or adjudication of incompetency.

**ARTICLE 11.11 NUMBER AND GENDER OF WORDS**

Whenever the context so admits or requires, all references herein in one number shall be deemed extended to and including the other number, whether singular or plural, and the use of any gender shall be applicable to all genders.

**ARTICLE 11.12 ACCESS TO RECORDS**

Representatives of Federal Agencies, if applicable, and the State of Florida shall have access to the work whenever it is in preparation of progress. On federally assisted projects the Federal Agency, the Comptroller General of the United States, or any authorized representative shall have access to any books, documents, papers, and records of the Contractor which are pertinent to the project for the purpose of making audit, examination, excerpts, and transcription thereof.

**SECTION 12  
LABOR STANDARDS**

**ARTICLE 12.01 LABOR STANDARDS**

The Contractor shall comply with all of the regulations set forth in "Labor Standards Provisions for Federally Assisted Construction Contracts", which may be attached, and any applicable Florida Statutes.

**ARTICLE 12.02 NOTICE TO LABOR UNIONS**

If required, the Contractor shall provide Labor Unions and other organizations of workers, and shall post, in a conspicuous place available to employees or applicants for employment, a completed copy of the form entitled "Notice to Labor Unions or Other Organizations of Workers" attached to and made a part of this Agreement.

**ARTICLE 12.03 SAFETY AND HEALTH REGULATIONS**

The Contractor shall comply with the Department of Labor Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (PL 91- 596) and under Section 107 of the Contract Work Hours and Safety Standards Act (PL 91-54). Nothing in these Acts shall be construed to supersede or in any manner affect any worker's compensation law or statutory rights, duties, or liabilities of employers and employees under any law with respect to injuries, diseases, or death of employees arising out of, or in the course of, employment.

**ARTICLE 12.04 EEO AFFIRMATIVE ACTION REQUIREMENTS**

The Contractor understands and agrees to be bound by the equal opportunity requirements of Federal regulations which shall be applicable throughout the performance of work under this Contract. The Contractor also agrees to similarly

bind contractually each subcontractor. In policies, the Contractor agrees to engage in Affirmative Action directed at promoting and ensuring equal employment opportunity in the work force used under the Contract (and the Contractor agrees to require contractually the same effort of all subcontractors whose subcontractors exceed \$100,000). The Contractor understands and agrees that "Affirmative Action" as used herein shall constitute a good faith effort to achieve and maintain minority employment in each trade in the on-site work force used on the Contract.

**ARTICLE 12.05 PREVAILING RATES OF WAGES**

Florida's prevailing wage law was repealed effective April 25, 1979.

For Federally assisted projects, appropriate prevailing wage rate determinations are indicated on pages beginning with WR-1.

\* \* \* \* \*

IN WITNESS THEREOF, the parties have hereunto set their hands and seals, and such of them as are corporation have caused these present to be signed by their duly authorized officers.

CITY OF TAMPA, FLORIDA

\_\_\_\_\_  
Jane Castor, Mayor  
(SEAL)

ATTEST:

\_\_\_\_\_  
City Clerk

Approved as to Form:  
The execution of this document was authorized  
by Resolution No. \_\_\_\_\_

\_\_\_\_\_  
Jan McLean, Senior Assistant City Attorney

Contractor

By: \_\_\_\_\_  
(SEAL)

Title:

ATTEST:

\_\_\_\_\_  
Witness

TAMPA AGREEMENT (ACKNOWLEDGMENT OF PRINCIPAL)

STATE OF \_\_\_\_\_ )  
 ) SS:  
COUNTY OF \_\_\_\_\_ )

For a Corporation:

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me this \_\_\_\_ of \_\_\_\_\_, 20\_\_ by \_\_\_\_\_ of \_\_\_\_\_, a \_\_\_\_\_ corporation, on behalf of the corporation. He/she is \_\_\_\_ personally known or has \_\_\_\_ produced \_\_\_\_\_ as identification.

\_\_\_\_\_  
Notary  
My Commission Expires:  
\_\_\_\_\_

For an Individual:

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me this \_\_\_\_ of \_\_\_\_\_, 20\_\_ by \_\_\_\_\_ who is \_\_\_\_ personally known to me or has \_\_\_\_ produced \_\_\_\_\_ as identification.

\_\_\_\_\_  
Notary  
My Commission Expires:  
\_\_\_\_\_

For a Firm:

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me this \_\_\_\_ of \_\_\_\_\_, 20\_\_ by \_\_\_\_\_ who signed on behalf of the said firm. He/she is \_\_\_\_ personally known or has \_\_\_\_ produced \_\_\_\_\_ as identification.

\_\_\_\_\_  
Notary  
My Commission Expires:  
\_\_\_\_\_  
\_\_\_\_\_

**PUBLIC CONSTRUCTION BOND**

Bond No. (enter bond number) \_\_\_\_\_

Name of Contractor: \_\_\_\_\_

Principal Business Address of Contractor: \_\_\_\_\_

\_\_\_\_\_

Telephone Number of Contractor: \_\_\_\_\_

Name of Surety (if more than one list each): \_\_\_\_\_

\_\_\_\_\_

Principal Business Address of Surety: \_\_\_\_\_

\_\_\_\_\_

Telephone Number of Surety: \_\_\_\_\_

Owner is The City of Tampa, Florida

Principal Business Address of Owner: \_\_\_\_\_ 306 E Jackson St, Tampa, FL 33602

\_\_\_\_\_ Contract Administration Department (280A4N)

Telephone Number of Owner: \_\_\_\_\_ 813/274-8456

Contract Number Assigned by City to contract which is the subject of this bond: \_\_\_\_\_

Legal Description or Address of Property Improved or Contract Number is: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

General Description of Work and Services: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

KNOW ALL MEN BY THESE PRESENTS That we, \_\_\_\_\_

\_\_\_\_\_  
(Name of Contractor)

as Principal, hereinafter called CONTRACTOR, of the State of \_\_\_\_\_, and

\_\_\_\_\_  
(Name of Surety)

a corporation organized and existing under and by virtue of the laws of the State of \_\_\_\_\_, and regularly authorized to do business in the State of Florida, as SURETY, are held and firmly bound unto the City of Tampa, a municipal corporation organized and existing under the laws of the State of Florida, hereinafter called Owner, in the penal sum of \_\_\_\_\_ Dollars and \_\_\_\_\_ Cents (\$ \_\_\_\_\_), lawful money of the United States of America, for the payment whereof well and truly to be made, we bind ourselves, our heirs, executors, and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS BOND is that if Principal:

1. Performs the contract dated \_\_\_\_\_, \_\_\_\_\_, 20\_\_\_\_, between Principal and Owner for construction of \_\_\_\_\_, the contract being made a part of this bond by reference, in the time and in the manner prescribed in the contract; and
2. Promptly makes payments to all claimants, as defined in Section 255.05(1) (Section 713.01), Florida Statutes, supplying Principal with labor, materials, or supplies, used directly or indirectly by Principal in the prosecution of the work provided for in the contract; and
3. Pays Owner all losses, damages, expenses, costs, and attorney's fees, including appellate proceedings, that Owner sustains because of a default by Principal under the contract; and
4. Performs the guarantee of all work and materials furnished under the contract for the time specified in the contract, then this bond is void; otherwise it remains in full force.
5. Contractor and Surety acknowledge that the Work for which this bond has been issued may be one of several such contract documents for a group of projects. This bond does not secure covenants to pay for or to perform design services survey or program management services. The Owner/Obligee is expected to reasonably account for damages that are caused to Owner with respect to Principal's (Contractor's) default in performance of the scope of the Work incorporated by reference into the bond, and notwithstanding any contractual or common law remedy permitted to Owner as against Contractor, the obligation of Surety for any damages under this bond shall be determined by the cost of completion of the Work less the contract balance unpaid upon default of Contractor for the Work plus liquidated damages at the rate of \$500.00 per day for delays by the Contractor and/or Surety in reaching substantial completion.
6. The notice requirements for claimants and conditions for entitlement to payment set forth in Section 255.05, Fla. Stat. and the limitations period to actions upon Section 255.05, Fla. Stat. bonds apply to claimants seeking payment from surety under this bond. Any action instituted by a claimant under this bond for payment must be in accordance with the notice and time limitation provisions in Section 255.05, Florida Statutes.
7. The Surety, for value received, hereby stipulates and agrees that no changes, extensions of time, alterations or additions to the terms of the contract documents or other Work to be performed hereunder, or the specifications referred to therein shall in any way affect its obligations under this bond, and it does hereby waive notice of any such changes, extensions of time, alterations or additions to the terms of the Contract or to Work or to the specifications.

8. The above SURETY states that it has read all of the Contract Documents made by the CONTRACTOR with the CITY, hereto attached, and the terms and conditions of the contract and work, and is familiar therewith and in particular those portions of the Agreement concerning the guaranty of such CONTRACTOR for a period of one year following the date of the final acceptance of the completed work under the Contract by the CITY, all of which this BOND includes.

DATED ON \_\_\_\_\_, 20\_\_

\_\_\_\_\_  
(Name of Principal)

\_\_\_\_\_  
(Name of Surety)

\_\_\_\_\_  
(Principal Business Address)

\_\_\_\_\_  
(Surety Address)

By \_\_\_\_\_

By \_\_\_\_\_  
(As Attorney in Fact)\*

Title \_\_\_\_\_

\_\_\_\_\_  
Telephone Number of Surety

\_\_\_\_\_  
Telephone Number of Principal

Approved as to legal sufficiency:

**Countersignature:**

By \_\_\_\_\_  
Assistant City Attorney

\_\_\_\_\_  
(Name of Local Agency)

\_\_\_\_\_  
(Address of Resident Agent)

By \_\_\_\_\_

Title \_\_\_\_\_

\_\_\_\_\_  
Telephone Number of Local Agency

\*(As Attorney in Fact) attach Power of Attorney and Current Certificate with Original Signature

# SPECIFICATIONS GENERAL PROVISIONS

## SECTION 1 SCOPE AND INTENT

### **G-1.01 DESCRIPTION**

The work to be done consists of the furnishing of all labor, materials and equipment, and the performance of all work included in this Contract.

### **G-1.02 WORK INCLUDED**

The Contractor shall furnish all labor, superintendence, materials, plant, power, light, heat, fuel, water, tools, appliances, equipment, supplies, and other means of construction necessary or proper for performing and completing the work. He shall obtain and pay for all required permits. He shall perform and complete the work in the manner best calculated to promote rapid construction consistent with safety of life and property and to the satisfaction of the Engineer, and in strict accordance with the Contract Documents. The Contractor shall clean up the work and maintain it during and after construction, until accepted, and shall do all work and pay all costs incidental thereto. He shall repair or restore all structures and property that may be damaged or disturbed during performance of the work.

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

The Contractor shall provide and maintain such modern plant, tools, and equipment as may be necessary, in the opinion of the Engineer, to perform in a satisfactory and acceptable manner all the work required by this Contract. Only equipment of established reputation and proven efficiency shall be used. The Contractor shall be solely responsible for the adequacy of his plant and equipment, prior approval of the Engineer notwithstanding.

### **G-1.03 PUBLIC UTILITY INSTALLATIONS AND STRUCTURES**

Public utility installations and structures shall be understood to include all poles, tracks, pipes, wires, conduits, house service connections, vaults, manholes, and all other appurtenances and facilities pertaining thereto whether owned or controlled by the City, other governmental bodies or privately owned by individuals, firms, or corporations, and used to serve the public with transportation, traffic control, gas, electricity, telephone, sewerage, drainage, water or other public or private property which may be affected by the work.

The Contract Documents contain data relative to existing public utility installations and structures above and below the ground surface. These data are not guaranteed as to their completeness or accuracy and it is the responsibility of the Contractor to make his own investigations to inform himself

fully of the character, condition and extent of all such installations and structures as may be encountered and as may affect the construction operations.

The Contractor shall protect all public utility installations and structures from damage during the work. Access across any buried public utility installation or structure shall be made only in such locations and by means approved by the Engineer. The Contractor shall so arrange his operations as to avoid any damage to these facilities. All required protective devices and construction shall be provided by the Contractor at his expense. All existing public utilities damaged by the Contractor which are shown on the Plans or have been located in the field by the utility shall be repaired by the Contractor, at his expense, as directed by the Engineer. No separate payment shall be made for such protection or repairs to public utility installations or structures.

Public utility installations or structures owned or controlled by the City or other governmental body which are shown on the Plans to be removed, relocated, replaced or rebuilt by the Contractor shall be considered as a part of the general cost of doing the work and shall be included in the prices bid for the various Contract Items. No separate payment shall be made therefor.

Where public utility installations or structures owned or controlled by the City or other governmental body are encountered during the course of the work, and are not indicated on the Plans or in the Specifications, and when, in the opinion of the Engineer, removal, relocation, replacement or rebuilding is necessary to complete the work under this Contract, such work shall be accomplished by the utility having jurisdiction or such work may be ordered, in writing by the Engineer, for the Contractor to accomplish. If such work is accomplished by the utility having jurisdiction it will be carried out expeditiously and the Contractor shall give full cooperation to permit the utility to complete the removal, relocation, replacement or rebuilding as required. If such work is accomplished by the Contractor, it will be paid for as extra work as provided for in Article 7.02 of the Agreement.

The Contractor shall, at all times in performance of the work, employ approved methods and exercise reasonable care and skill so as to avoid unnecessary delay, injury, damage or destruction of public utility installations and structures; and shall, at all times in the performance of the work, avoid unnecessary interference with, or interruption of, public utility services, and shall cooperate fully with the owners thereof to that end.

All City and other governmental utility departments and other owners of public utilities, which may be affected by the work, will be informed in writing by the Engineer within two weeks after the execution of the Contract or Contracts covering the work. Such notice will set out, in general, and direct attention to, the responsibilities of the City and other governmental



utility departments and other owners of public utilities for such installations and structures as may be affected by the work and will be accompanied by one set of Plans and Specifications covering the work under such Contract or Contracts.

In addition to the general notice given by the Engineer, the Contractor shall give written notice to all City and other governmental utility departments and other owners of public utilities of the location of his proposed construction operations, at least forty-eight (48) hours in advance of breaking ground in any area or on any unit of the work. This can be accomplished by making the appropriate contact with the "Underground Utility Notification Center for Excavators (Call Candy)".

The maintenance, repair, removal, relocation, or rebuilding of public utility installations and structures, when accomplished by the Contractor as herein provided, shall be done by methods approved by the Engineer.

## **SECTION 2 PLANS AND SPECIFICATIONS**

### **G-2.01 PLANS**

The Plans referred to in the Contract Documents bear the general project name and number as shown in the Notice To Bidders.

When obtaining data and information from the Plans, figures shall be used in preference to scaled dimensions, and large scale drawings in preference to small scale drawings.

### **G-2.02 COPIES FURNISHED TO CONTRACTOR**

After the Contract has been executed, the Contractor will be furnished with five sets of paper prints, the same size as the original drawings, of each sheet of the Plans and five copies of the Specifications. Additional copies of the Plans and Specifications, when requested, may be furnished to the Contractor at cost of reproduction.

The Contractor shall furnish each of the subcontractors, manufacturers, and material suppliers such copies of the Contract Documents as may be required for his work.

### **G-2.03 SUPPLEMENTARY DRAWINGS**

When, in the opinion of the Engineer, it becomes necessary to explain more fully the work to be done or to illustrate the work further or to show any changes which may be required, drawings known as Supplementary Drawings, with specifications pertaining thereto, will be prepared by the Engineer and five paper prints thereof will be given to the Contractor.

The Supplementary Drawings shall be binding upon the Contractor with the same force as the Plans. Where such Supplementary Drawings require either less or more than the estimated quantities of work, credit to the City or compensation therefor to the Contractor shall be subject to the terms of the Agreement.

### **G-2.04 CONTRACTOR TO CHECK PLANS AND DATA**

The Contractor shall verify all dimensions, quantities, and details shown on the Plans, Supplementary Drawings, Schedules, Specifications, or other data received from the Engineer, and shall notify him of all errors, omissions, conflicts, and discrepancies found therein. Failure to discover or correct errors, conflicts or discrepancies shall not relieve the Contractor of full responsibility for unsatisfactory work, faulty construction or improper operation resulting therefrom nor from rectifying such conditions at his own expense. He will not be allowed to take advantage of any errors or omissions as full instructions will be furnished by the Engineer, should such errors or omissions be discovered. All schedules are given for the convenience of the Engineer and the Contractor and are not guaranteed to be complete. The Contractor shall assume all responsibility for the making of estimates of the size, kind, and quality of materials and equipment included in work to be done under the Contract.

### **G-2.05 SPECIFICATIONS**

The specifications consist of four parts, the General Provisions, the Technical Specifications, the Special Provisions and the Contract Items. The General Provisions and Technical Specifications contain general requirements which govern the work. The Special Provisions and the Contract Items modify and supplement these by detailed requirements for the work and shall always govern, whenever there appears to be conflict.

### **G-2.06 INTENT**

All work called for in the Specifications applicable to this Contract, but not shown on the Plans in their present form, or vice versa, shall be of like effect as if shown or mentioned in both. Work not specified in either the Plans or 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.

The apparent silence of the Specifications as to any detail, or the apparent omission from them of a detailed description concerning any work to be done and materials to be furnished, shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of the best quality is to be used, and interpretation of these Specifications shall be made upon that basis.

## **SECTION 3 WORKING DRAWINGS**

### **G-3.01 SCOPE**

The Contractor shall promptly prepare and submit layout, detail and shop drawings to insure proper construction, assembly, and installation of the work using those materials and methods as hereafter specified under the Technical Specifications, Special Provisions and Contract Items.

These drawings shall accurately and distinctly present the following:

- a. All working and erection dimensions.
- b. Arrangements and sectional views.
- c. Necessary details, including complete information for making connections between work under this Contract and work under other Contracts.
- d. Kinds of materials and finishes.
- e. Parts listed and description thereof.

Drawings for mechanical equipment shall present, where applicable, such data as dimensions, weight and performance characteristics. These data shall show conformance with the performance characteristics and other criteria incorporated in the Plans and Specifications.

Each drawing shall be dated and shall contain the name of the project, Division number and description, the technical specifications section number, names of equipment or materials and the location at which the equipment or materials are to be installed. Location shall mean both physical location and location relative to other connected or attached material. The Engineer will return unchecked any submittal which does not contain complete data on the work and full information on related matters.

Stock or standard drawings will not be accepted for review unless full identification and supplementary information is shown thereon in ink or typewritten form.

The Contractor shall review all working drawing submittals before transmitting them to the Engineer to determine that they comply with requirements of the Specifications. Drawings which are incomplete or are not in compliance with the Contract Documents shall not be submitted for processing by the Engineer. The Contractor shall place his stamp of approval on all working drawings submitted to the Engineer to indicate compliance with the above.

#### **G-3.02 APPROVAL**

If the working drawings show departures from the Contract requirements, the Contractor shall make specific mention thereof in his letter of submittal; otherwise approval of such submittals shall not constitute approval of the departure. Approval of the drawings shall constitute approval of the subject matter thereof only and not of any structure, material, equipment, or apparatus shown or indicated.

The approval of drawings will be general and shall not relieve the Contractor of responsibility for the accuracy of such drawings, nor for the proper fitting and construction of the work, nor for the furnishing of materials or work required by the Contract and not indicated on the drawings. No work called for by working drawings shall be done until such drawings have been approved by the Engineer.

The procedure in seeking approval of the working drawings shall be as follows:

1. The Contractor shall submit four complete sets of drawings

and other descriptive data together with one copy of a letter of transmittal to the Engineer for approval. The letter of transmittal shall contain the name of the project, contract number, technical specifications section number, the name of the Contractor, a list of drawings with numbers and titles, and any other pertinent information.

2. Drawings or descriptive data will be stamped "Approved", "Approved Subject to Corrections Marked", or "Examined and Returned for Correction" and one copy with a letter of transmittal will be returned to the Contractor.

3. If a drawing or other data is stamped "Approved", the Contractor shall insert the date of approval on five additional copies of the document and transmit the five copies to the Engineer together with one copy of a letter of transmittal containing substantially the same information as described in Instruction 1. above.

4. If a drawing or other data is stamped "Approved Subject to Corrections Marked", the Contractor shall make the corrections indicated and proceed as in Instruction 3., above.

5. If a drawing or data is stamped "Examined and Returned for Correction", the Contractor shall make the necessary corrections and resubmit the documents as set forth in Instruction 1., above. The letter of transmittal shall indicate that this is a resubmittal.

The Contractor shall revise and resubmit the working drawings as required by the Engineer, until approval thereof is obtained.

## **SECTION 4 MATERIALS AND EQUIPMENT**

### **G-4.01 GENERAL REQUIREMENTS**

All materials, appliances, and types or methods of construction shall be in accordance with the Specifications and shall, in no event, be less than that necessary to conform to the requirements of any applicable laws, ordinances, and codes.

All materials and equipment shall be new, unused, and correctly designed. They shall be of standard first grade quality, produced by expert personnel, and intended for the use for which they are offered. Materials or equipment which, in the opinion of the Engineer, are inferior or of a lower grade than indicated, specified, or required will not be accepted.

The quality of Workmanship and Materials entering into the work under this Contract shall conform to the requirements of the pertinent sections, clauses, paragraphs, and sentences, both directly and indirectly applicable thereto, of that part of the Technical Specifications, whether or not direct reference to such occurs in the Contract Items.

Equipment and appurtenances shall be designed in conformity with ANSI, ASME, IEEE, NEMA and other

generally accepted standards and shall be of rugged construction and of sufficient strength to withstand all stresses which may occur during fabrication, testing, transportation, installation, and all conditions of operation. All bearings and moving parts shall be adequately protected against wear by bushings or other approved means and shall be fully lubricated by readily accessible devices. Details shall be designed for appearance as well as utility. Protruding members, joints, corners, gear covers, and the like, shall be finished in appearance. All exposed welds shall be ground smooth and the corners of structural shapes shall be mitered.

Equipment shall be of the approximate dimensions as indicated on the Plans or as specified, shall fit the spaces shown on the Plans with adequate clearances, and shall be capable of being handled through openings provided in the structure for this purpose. The equipment shall be of such design that piping and electrical connections, ductwork, and auxiliary equipment can be assembled and installed without causing major revisions to the location or arrangement of any of the facilities.

Machinery parts shall conform exactly to the dimensions shown on the working drawings. There shall be no more fitting or adjusting in setting up a machine than is necessary in assembling high grade apparatus of standard design. The equivalent parts of identical machines shall be made interchangeable. All grease lubricating fittings on equipment shall be of a uniform type. All machinery and equipment shall be safeguarded in accordance with the safety codes of the ANSI and applicable state and local codes.

#### **G-4.02 MANUFACTURER**

The names of proposed manufacturers, suppliers, material, and dealers who are to furnish materials, fixtures, equipment, appliances or other fittings shall be submitted to the Engineer for approval, as early as possible, to afford proper investigation and checking. Such approval must be obtained before shop drawings will be checked. No manufacturer will be approved for any materials to be furnished under this Contract unless he shall be of good reputation and have a plant of ample capacity. He shall, upon the request of the Engineer, be required to submit evidence that he has manufactured a similar product to the one specified and that it has been previously used for a like purpose for a sufficient length of time to demonstrate its satisfactory performance.

All transactions with the manufacturers or subcontractors shall be through the Contractor, unless the Contractor shall request, in writing to the Engineer, that the manufacturer or subcontractor deal directly with the Engineer. Any such transactions shall not in any way release the Contractor from his full responsibility under this Contract.

Any two 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.

#### **G-4.03 REFERENCE TO STANDARDS**

Whenever reference is made to the furnishing of materials or

testing thereof to conform to the standards of any technical society, organization or body, it shall be construed to mean the latest standard, code, specification or tentative specification adopted and published at the date of advertisement for proposals, even though reference has been made to an earlier standard, and such standards are made a part hereof to the extent which is indicated or intended.

Reference to a technical society, organization or body may be made in the Specifications by abbreviations, in accordance with the following list:

AASHTO for American Association of State Highway and Transportation Officials (formerly AASHO)  
ACI for American Concrete Institute  
AGMA for American Gear Manufacturer's Association  
AFBMA for Anti-Friction Bearing Manufacturer's Association  
AISC for American Institute of Steel Construction  
AISI for American Iron and Steel Institute  
ANSI for American National Standards Institute  
ASCE for American Society of Civil Engineers  
ASTM for American Society for Testing and Materials  
ASME for American Society of Mechanical Engineers  
AWS for American Welding Society  
AWWA for American Water Works Association  
AWPA for American Wood Preservers Association  
CEMA for Conveyor Equipment Manufacturers Association  
CIPRA for Cast Iron Pipe Research Association  
IEEE for Institute of Electrical and Electronic Engineers  
IPCEA for Insulated Power Cable Engineers Association  
NEC for National Electrical Code  
NEMA for National Electrical Manufacturers Association  
SAE for Society of Automotive Engineers  
SHBI for Steel Heating Boiler Institute  
Fed.Spec. for Federal Specifications  
Navy Spec. for Navy Department Specifications  
U.L.,Inc. for Underwriters' Laboratories, Inc.

When no reference is made to a code, standard or specification, the Standard Specifications of the ANSI, the ASME, the ASTM, the IEEE, or the NEMA shall govern.

#### **G-4.04 SAMPLES**

The Contractor shall, when required, submit to the Engineer for approval typical samples of materials and equipment. The samples shall be properly identified by tags and shall be submitted sufficiently in advance of the time when they are to be incorporated into the work, so that rejections thereof will not cause delay. A letter of transmittal, in duplicate, from the Contractor requesting approval must accompany all such samples.

#### **G-4.05 EQUIVALENT QUALITY**

Whenever, in the Contract Documents, an article, material, apparatus, equipment, or process is called for by trade name or by the name of a patentee, manufacturer, or dealer or by reference to catalogs of a manufacturer or dealer, it shall be understood as intending to mean and specify the article, material, apparatus, equipment or process designated, or any

equal thereto in quality, finish, design, efficiency, and durability and equally serviceable for the purposes for which it is intended.

Whenever material or equipment is submitted for approval as being equal to that specified, the decision as to whether or not such material or equipment is equal to that specified shall be made by the Engineer.

Upon rejection of any material or equipment submitted as the equivalent of that specifically named in the Contract, the Contractor shall immediately proceed to furnish the designated material or equipment.

Neither the approval by the Engineer of alternate material or equipment as being equivalent to that specified nor the furnishing of the material or equipment specified, shall in any way relieve the Contractor of responsibility for failure of the material or equipment, due to faulty design, material, or workmanship, to perform the functions required of them by the Specifications.

#### **G-4.06 DELIVERY**

The Contractor shall deliver materials in ample quantities to insure the most speedy and uninterrupted progress of the work so as to complete the work within the allotted time. The Contractor shall also coordinate deliveries in order to avoid a delay in, or impediment of, the progress of the work of any related Contractor.

#### **G-4.07 CARE AND PROTECTION**

The Contractor shall be solely responsible for properly storing and protecting all materials, equipment, and work furnished under the Contract from the time such materials and equipment are delivered at the site of the work until final acceptance thereof. He shall, at all times, take necessary precautions to prevent injury or damage by water, freezing, or by inclemencies of the weather to such materials, equipment and work. All injury or damage to materials, equipment, or work resulting from any cause whatsoever shall be made good by the Contractor.

The Engineer shall, in all cases, determine the portion of the site to be used by the Contractor for storage, plant or for other purposes. If, however, it becomes necessary to remove and restack materials to avoid impeding the progress of any part of the work or interference with the work to be done by any other Contractor, the Contractor shall remove and restack such materials at his own expense.

#### **G-4.08 TOOLS AND ACCESSORIES**

The Contractor shall, unless otherwise stated in the Contract Documents, furnish with each type, kind or size of equipment, one complete set of suitably marked high grade special tools and appliances which may be needed to adjust, operate, maintain, or repair the equipment. Such tools and appliances shall be furnished in approved painted steel cases, properly labeled and equipped with good grade cylinder locks and duplicate keys.

Spare parts shall be furnished as specified.

Each piece of equipment shall be provided with a substantial nameplate, securely fastened in place and clearly inscribed with the manufacturer's name, year of manufacture, serial number, weight and principal rating data.

#### **G-4.09 INSTALLATION OF EQUIPMENT**

The Contractor shall have on hand sufficient proper equipment and machinery of ample capacity to facilitate the work and to handle all emergencies normally encountered in work of this character.

Equipment shall be erected in a neat and workmanlike manner on the foundations at the locations and elevations shown on the Plans, unless directed otherwise by the Engineer during installation. All equipment shall be correctly aligned, leveled and adjusted for satisfactory operation and shall be installed so that proper and necessary connections can be made readily between the various units.

The Contractor shall furnish, install and protect all necessary anchor and attachment bolts and all other appurtenances needed for the installation of the devices included in the equipment specified. Anchor bolts shall be as approved by the Engineer and made of ample size and strength for the purpose intended. Substantial templates and working drawings for installation shall be furnished.

The Contractor shall, at his own expense, furnish all materials and labor for, and shall properly bed in non-shrink grout, each piece of equipment on its supporting base that rests on masonry foundations. Grout shall completely fill the space between the equipment base and the foundation.

#### **G-4.10 OPERATING INSTRUCTIONS**

The Contractor, through qualified individuals, shall adequately instruct designated employees of the City in the operation and care of all equipment installed hereunder, except for equipment that may be furnished by the City.

The Contractor shall also furnish and deliver to the Engineer three complete sets for permanent files, identified in accordance with Subsection G-3.01 hereof, of instructions, technical bulletins and any other printed matter, such as diagrams, prints or drawings, containing full information required for the proper operation, maintenance, and repair, of the equipment installed and the ordering of spare parts, except for equipment that may be furnished by the City.

In addition to the above three copies, the Contractor shall furnish any additional copies that may be required for use during construction and start-up operations.

#### **G-4.11 SERVICE OF MANUFACTURER'S ENGINEER**

The Contract prices for equipment shall include the cost of furnishing a competent and experienced engineer or superintendent who shall represent the manufacturer and shall assist the Contractor, when required, to install, adjust, test and place in operation the equipment in conformity with the Contract Documents. After the equipment is placed in

permanent operation by the City, such engineer or superintendent shall make all adjustments and tests required by the Engineer to provide that such equipment is in proper and satisfactory operating condition, and shall instruct such personnel as may be designated by the City in the proper operation and maintenance of such equipment.

## **SECTION 5 INSPECTION AND TESTING**

### **G-5.01 GENERAL**

The Contractor's attention is hereby directed to Article 3.03 of the Agreement.

Inspection and testing of materials will be performed by the City unless otherwise specified.

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 copies of the reports shall be submitted and authoritative certification thereof must be furnished to the Engineer as a prerequisite for the acceptance of any material or equipment.

If, in the making of any test of any material or equipment, it is ascertained by the Engineer that the material or equipment does not comply with the Contract, the Contractor will be notified thereof and he will be directed to refrain from delivering said material and equipment, or to remove it promptly from the site or from the work and replace it with acceptable material, without cost to the City.

Tests of electrical and mechanical equipment and appliances shall be conducted in accordance with recognized test codes of the ANSI, ASME, or the IEEE, except as may otherwise be stated herein.

The Contractor shall be fully responsible for the proper operation of equipment during tests and instruction periods and shall neither have nor make any claim for damage which may occur to equipment prior to the time when the City formally takes over the operation thereof.

### **G-5.02 COSTS**

All inspection and testing of materials furnished under this Contract will be performed by the City or duly authorized inspection engineers or inspection bureaus without cost to the Contractor, unless otherwise expressly specified.

The cost of shop and field tests of equipment and of certain other tests specifically called for in the Contract Documents shall be borne by the Contractor and such costs shall be deemed to be included in the contract price.

Materials and equipment submitted by the Contractor as the equivalent to those specifically named in the Contract may be tested by the City for compliance. The Contractor shall reimburse the City for the expenditures incurred in making

such tests on materials and equipment which are rejected for noncompliance.

### **G-5.03 INSPECTIONS OF MATERIALS**

The Contractor shall give notice, in writing to the Engineer, sufficiently in advance of his intention to commence the manufacture or preparation of materials especially manufactured or prepared for use in or as part of the permanent construction. Such notice shall contain a request for inspection, the date of commencement and the expected date of completion of the manufacture or preparation of materials. Upon receipt of such notice the Engineer will arrange to have a representative present at such times during the manufacture as may be necessary to inspect the materials or he will notify the Contractor that inspection will be made at a point other than the point of manufacture, or he will notify the Contractor that inspection will be waived. The Contractor must comply with these provisions before shipping any material. Such inspection shall not release the Contractor from the responsibility for furnishing materials meeting the requirements of the Contract Documents.

### **G-5.04 CERTIFICATE OF MANUFACTURE**

When inspection is waived or when the Engineer so requires, the Contractor shall furnish to him authoritative evidence in the form of Certificates of Manufacture that the materials to be used in the work have been manufactured and tested in conformity with the Contract Documents. 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.

### **G-5.05 SHOP TESTS OF OPERATING EQUIPMENT**

Each piece of equipment for which pressure, duty, capacity, rating, efficiency, performance, function, or special requirements are specified shall be tested in the shop of the maker in a manner which shall conclusively prove that its characteristics comply fully with the requirements of the Contract Documents. No such equipment shall be shipped to the work until the Engineer notifies the Contractor, in writing, that the results of such tests are acceptable.

Five copies of the manufacturer's actual test data and interpreted results thereof, accompanied by a certificate of authenticity sworn to by a responsible official of the manufacturing company, shall be forwarded to the Engineer for approval.

The cost of the shop tests and of furnishing manufacturer's preliminary and shop test data of operating equipment shall be borne by the Contractor.

### **G-5.06 PRELIMINARY FIELD TESTS**

As soon as conditions permit, the Contractor shall furnish all labor, materials, and instruments and shall make preliminary field tests of equipment. If the preliminary field tests disclose any equipment furnished under this Contract which does not comply with the requirements of the Contract Documents, the Contractor shall, prior to the acceptance tests, make all changes, adjustments, and replacements required.

## TEMPORARY STRUCTURES

### G-5.07 FINAL FIELD TESTS

Upon completion of the work and prior to final payment, all equipment and appliances installed under this Contract shall be subjected to acceptance tests as specified or required to prove compliance with the Contract Documents.

The Contractor shall furnish labor, fuel, energy, water and all other materials, equipment, and instruments necessary for all acceptance tests, at no additional cost to the City.

### G-5.08 FAILURE OF TESTS

Any defects in the materials and equipment or their failure to meet the tests, guarantees or requirements of the Contract Documents shall be promptly corrected by the Contractor by replacements or otherwise. The decision of the Engineer as to whether or not the Contractor has fulfilled his obligations under the Contract shall be final and conclusive. If the Contractor fails to make those corrections or if the improved materials and equipment, when tested, shall again fail to meet the guarantees or specified requirements, the City, notwithstanding its partial payment for work, and materials and equipment, may reject the materials and equipment and may order the Contractor to remove them from the site at his own expense.

In case the City rejects any materials and equipment, then the Contractor shall replace the rejected materials and equipment within a reasonable time. If he fails to do so, the City may, after the expiration of a period of thirty calendar days after giving him notice in writing, proceed to replace such rejected materials and equipment, and the cost thereof shall be deducted from any compensation due or which may become due the Contractor under this Contract.

The City agrees to obtain other equipment within a reasonable time and the Contractor agrees that the City may use the equipment furnished by him without rental or other charges until the new equipment is obtained.

Materials or work in place that fails to pass acceptability tests shall be retested at the direction of the construction engineer all such retests shall be at the Contractor's expense. The rates charged shall be in accordance with the Department of Public Works current annual inspection contract which is available for inspection at the offices of the Department of Public Works.

### G-5.09 FINAL INSPECTION

The procedures for final inspection shall be in accordance with the provisions of Article 4.07 of the Agreement. During such final inspections, the work shall be clean and free from water. In no case will the final estimate be prepared until the Contractor has complied with all the requirements set forth and the Engineer has made his final inspection of the entire work and is satisfied that the entire work is properly and satisfactorily constructed in accordance with the requirements of the Contract Documents.

## SECTION 6

### G-6.01 GENERAL

All false work, scaffolding, ladders, hoistways, braces, pumping plants, shields, trestles, roadways, sheeting, centering forms, barricades, drains, flumes, and the like, any of which may be needed in the construction of any part of the work and which are not herein described or specified in detail, must be furnished, maintained and removed by the Contractor, and he shall be responsible for the safety and efficiency of such works and for any damages that may result from their failure or from their improper construction, maintenance, or operation.

### G-6.02 PUBLIC ACCESS

At all points in the work where public access to any building, house, place of business, public road, or sidewalk would be obstructed by any action of the Contractor in executing the work required by this Contract, the Contractor shall provide such temporary structure, bridges or roadway as may be necessary to maintain public access at all times. At least one lane for vehicular traffic shall be maintained in streets in which the Contractor is working. Street closure permits are required from the Department of Public Works.

The Contractor shall provide suitable temporary bridges, as directed by the Engineer, at street intersections when necessary for the maintenance of vehicular and pedestrian traffic.

Prior to temporarily cutting of access to driveways and garages, the Contractor shall give twelve (12) hours notice to affected property owners. Interruptions to use of private driveways shall be kept to a minimum.

### G-6.03 CONTRACTOR'S FIELD OFFICE

The Contractor shall erect, furnish and maintain a field office with a telephone at the site during the entire period of construction. He or an authorized agent shall be present at this office at all times while his work is in progress. Readily accessible copies of both the Contract Documents and the latest approved working drawings shall be kept at this field office.

### G-6.04 TEMPORARY FENCE

If, during the course of the work, it is necessary to remove or disturb any fence or part thereof, the Contractor shall, at his own expense, if so ordered by the Engineer, provide a suitable temporary fence which shall be maintained until the permanent fence is replaced. The Engineer shall be solely responsible for the determination of the necessity for providing a temporary fence and the type of temporary fence to be used.

### G-6.05 RESPONSIBILITY FOR TEMPORARY STRUCTURES

In accepting the Contract, the Contractor assumes full responsibility for the sufficiency and safety of all temporary structures or work and for any damage which may result from their failure or their improper construction, maintenance, or operation and will indemnify and save harmless the City from

all claims, suits or actions and damages or costs of every description arising by reason of failure to comply with the above provisions.

## **SECTION 7 TEMPORARY SERVICES**

### **G-7.01 WATER**

The Contractor shall provide the necessary water supply at his own expense. He shall, if necessary, provide and lay necessary waterlines from existing mains to the place of using, shall secure all necessary permits and pay for all taps to water mains or hydrants and for all water used at the established rates.

### **G-7.02 LIGHT AND POWER**

The Contractor shall provide, at his own expense, temporary lighting and power facilities required for the proper prosecution and inspection of the work. If, in the opinion of the Engineer, these facilities are inadequate, the Contractor will not be permitted to proceed with any portion of the work affected thereby.

### **G-7.03 SANITARY REGULATIONS**

The Contractor shall prohibit and prevent the committing of nuisances on the site of the work or on adjoining property and shall discharge any employee who violates this rule.

Ample washrooms and toilet facilities and a drinking water supply shall be furnished and maintained in strict conformity with the law by the Contractor for use by his employees.

### **G-7.04 ACCIDENT PREVENTION**

Precautions shall be exercised at all times for the protection of persons and property. The safety provisions of applicable laws, building and construction codes shall be observed. The Contractor shall comply with the U. S. Department of Labor Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (PL 91-596), and under Section 107 of the Contract Work. Hours and Safety Standards Act (PL 91-54), except where state and local safety standards exceed the federal requirements and except where state safety standards have been approved by the Secretary of Labor in accordance with provisions of the Occupational Safety and Health Act.

### **G-7.05 FIRST AID**

The Contractor shall keep upon the site, at each location where work is in progress, a completely equipped first aid kit and shall provide ready access thereto at all times when men are employed on the work.

### **G-7.06 HEATING**

The Contractor shall provide temporary heat, at his own expense, whenever required on account of work being carried on during cold weather and to prevent freezing of water pipes and other damage to the work.

## **SECTION 8**

## **LINES AND GRADES**

### **G-8.01 GENERAL**

All work done under this Contract shall be constructed in accordance with the lines and grades shown on the Plans, or as given by the Engineer. The full responsibility for keeping alignment and grade shall rest upon the Contractor.

The Engineer will establish bench marks and base line controlling points. Reference remarks for lines and grades as the work progresses will be located to cause as little inconvenience to the prosecution of the work as possible. The Contractor shall so place excavation and other materials as to cause no inconvenience in the use of the use of the reference marks provided. He shall remove any obstructions placed by him contrary to this provision.

### **G-8.02 SURVEYS**

The Contractor shall furnish and maintain, at his own expense, stakes and other such materials, and give such assistance, including qualified helpers, as may be required by the Engineer for setting reference marks. The Contractor shall check such reference marks by such means as he may deem necessary and, before using them, shall call the Engineer's attention to any inaccuracies. The Contractor shall, at his own expense, establish all working or construction lines and grades as required from the reference marks set by the Engineer, and shall be solely responsible for the accuracy thereof. He shall, however, be subject to the check and review of the Engineer.

The Contractor shall keep the Engineer informed a reasonable time in advance as to his need for line and grade reference marks, in order that they may be furnished and all necessary measurements made for record and payment with the minimum of inconvenience to the Engineer or of delay to the Contractor.

It is the intention not to delay the work for the establishment of reference marks but, when necessary, working operations shall be suspended for such reasonable time as the Engineer may require for this purpose.

### **G-8.03 SAFEGUARDING MARKS**

The Contractor shall safeguard all points, stakes, grade marks, monuments and bench marks made or established on the work, bear the cost of reestablishing them if disturbed, and bear the entire expense of rectifying work improperly installed due to not maintaining or protecting or to removing without authorization such established points, stakes and marks.

The Contractor shall safeguard all existing and known property corners, monuments and marks adjacent to but not related to the work and, if required, shall bear the cost of reestablishing them if disturbed or destroyed.

### **G-8.04 DATUM PLANE**

All elevations indicated or specified refer to the Mean Sea Level Datum of the U.S.C. & G.S. (N.O.S.) which is 0.80 feet above the Mean Low Water Datum of the U. S. Army

Corps of Engineers.

## **SECTION 9 ADJACENT STRUCTURES AND LANDSCAPING**

### **G-9.01 RESPONSIBILITY**

The responsibility for removal, replacement, relocation, repair, rebuilding or protection of all public utility installations, including poles, tracks, pipes, wires, conduits, house service connections, vaults, manholes, sewers, traffic control and fire alarm signal circuit installations and other appurtenances and facilities shall be in accordance with G-1.02 and G-1.03.

The Contractor shall also be entirely responsible and liable for all damage or injury as a result of his operations to all other adjacent public and private property, structures of any kind and appurtenances thereto met with during the progress of the work. The cost of protection, replacement in their original locations and conditions or payment of damages for injuries to such adjacent public and private property and structures affected by the work, whether or not shown on the Plans, and the removal, relocation, and reconstruction of such items called for on the Plans or specified shall be included in the various Contract Items and no separate payment will be made therefor. Where such public and private property, structures of any kind and appurtenances thereto are not shown on the Plans and when, in the opinion of the Engineer, removal or relocation and reconstruction is necessary to avoid interference with the work, payment therefor will be made as provided for extra work in Article 7.02 of the Agreement.

### **G-9.02 PROTECTION OF TREES**

All trees and shrubs shall be adequately protected by the Contractor with boxes or otherwise and, within the City of Tampa, in accordance with ordinances governing the protection of trees. No excavated materials shall be placed so as to injure such trees or shrubs. Trees or shrubs destroyed by negligence of the Contractor or his employees shall be replaced by him with new stock of similar size and age, at the proper season, and at the sole expense of the Contractor.

Beneath trees or other surface structures, where possible, pipelines may be built in short tunnels, backfilled with excavated materials, except as otherwise specified, or the trees or structures carefully supported and protected from damage.

The City may order the Contractor, for the convenience of the City, to remove trees along the line of trench excavation. If so ordered, the City will obtain any permits required for removal of trees. Such tree removal ordered shall be paid for under the appropriate Contract Items.

### **G-9.03 LAWN AREAS**

Lawn areas shall be left in as good condition as before the starting of the work. Where sod is to be removed, it shall be carefully removed and later replaced, or the area where sod has been removed shall be restored with new sod in the

manner described in the Technical Specifications section.

### **G-9.04 RESTORATION OF FENCES**

Any fence, or part thereof, that is damaged or removed during the course of the work shall be replaced or repaired by the Contractor and shall be left in as good a condition as before the starting of the work. The manner in which the fence is repaired or replaced and the materials used in such work shall be subject to the approval of the Engineer. The cost of all labor, materials, equipment, and work for the replacement or repair of any fence shall be deemed included in the appropriate Contract Item or Items, or if no specific Item is provided therefor, as part of the overhead cost of the work, and no additional payment will be made therefor.

## **SECTION 10 PROTECTION OF WORK AND PUBLIC**

### **G-10.01 TRAFFIC REGULATIONS**

The Contractor shall arrange his work to comply with Article G-6.02. The work shall be done with the least possible inconvenience to the public and to that end the work may be confined by the Engineer to one block at a time.

### **G-10.02 BARRIERS AND LIGHTS**

During the prosecution of the work, the Contractor shall put up and maintain at all times such barriers, and lights, as will effectually prevent accidents. The Contractor shall provide suitable barricades, red lights, "danger" or "caution" or "street closed" signs and watchmen at all places where the work causes obstructions to the normal traffic or constitutes in any way a hazard to the public. Such barriers and signs shall be constructed to State of Florida Department of Transportation standards and placed as recommended by the Traffic Division of the City's Department of Public Works.

No open fires will be permitted.

### **G-10.03 SMOKE PREVENTIONS**

The Contractor shall use hard coal, coke, oil or gas as fuel for equipment generating steam. A strict compliance with ordinances regulating the production and emission of smoke will be required.

### **G-10.04 NOISE**

The Contractor shall eliminate noise to as great an extent as practicable at all times. Air compressing plants shall be equipped with silencers and the exhaust of all gasoline motors or other power equipment shall be provided with mufflers. In the vicinity of hospitals and schools, special care shall be used to avoid noise or other nuisances. The Contractor shall strictly observe all local regulations and ordinances covering noise control.

Except in the event of an emergency, no work shall be done between the hours of 7:00 p.m. and 7:00 a.m., or on Sundays.

If the proper and efficient prosecution of the work requires operations during the night, the written permission of the Engineer shall be obtained before starting such items of the work.



**SECTION 13  
CLEANING**

**G-10.05 ACCESS TO PUBLIC SERVICES**

Neither the materials excavated nor the materials or plant used in the construction of the work shall be so placed as to prevent free access to all fire hydrants, valves or manholes.

**G-10.06 DUST PREVENTION**

The Contractor shall prevent dust nuisance from his operations or from traffic by keeping the streets sprinkled with water at all times.

**G-10.07 PRIVATE PROPERTY**

The Contractor shall so conduct the work that no equipment, material, or debris will be placed or allowed to fall upon private property in the vicinity of the work unless he shall have obtained the owner's written consent thereto and shall have shown this consent to the Engineer.

**SECTION 11  
SLEEVES AND INSERTS**

**G-11.01 COORDINATION**

When the Contract requires the placing of conduits, saddles, boxes, cabinets, sleeves, inserts, foundation bolts, anchors, and other like work in floors, roofs, or walls of buildings and structures, they shall be promptly installed in conformity with the construction program. The Contractor who erects the floors, roofs, and walls shall facilitate such work by fully cooperating with the Contractors responsible for installing such appurtenances. The Contractor responsible for installing such appurtenances shall arrange the work in strict conformity with the construction schedule and avoid interference with the work of other contractors.

**G-11.02 OPENINGS TO BE PROVIDED**

In the event timely delivery of sleeves and other materials cannot be made and to avoid delay, the affected Contractor may arrange to have boxes or other forms set at the locations where the appurtenances are to pass through or into the floors, roofs, walls, or other work. Upon the subsequent installation of these appurtenances, the Contractor erecting the structure shall fill around them with materials as required by the Contract. The necessary expenditures incurred for the boxing out and filling in shall be borne by the Contractor or Contractors required to furnish the sleeves and inserts. Formed openings and later installation of sleeves will not be permitted at locations subject to hydrostatic pressure.

**SECTION 12  
CUTTING AND PATCHING**

**G-12.01 GENERAL**

The Contractor shall do all cutting, fitting, or patching of his portion of the work that may be required to make the several parts thereof join and coordinate in a manner satisfactory to the Engineer and in accordance with the Plans and Specifications. The work must be done by competent workmen skilled in the trade required by the restoration.

**G-13.01 DURING CONSTRUCTION**

During construction of the work, the Contractor shall, at all times, keep the site of the work and adjacent premises as free from material, debris, and rubbish as is practicable and shall remove the same from any portion of the site if, in the opinion of the Engineer, such material, debris, or rubbish constitutes a nuisance or is objectionable.

The Contractor shall remove from the site all of his surplus materials and temporary structures when no further need therefor develops.

**G-13.02 FINAL CLEANING**

At the conclusion of the work, all erection plant, tools, temporary structures and materials belonging to the Contractor shall be promptly taken away, and he shall remove and promptly dispose of all water, dirt, rubbish or any other foreign substances.

The Contractor shall thoroughly clean all equipment and materials installed by him and shall deliver such materials and equipment undamaged in a bright, clean, polished, and new appearing condition.

**SECTION 14  
MISCELLANEOUS**

**G-14.01 PROTECTION AGAINST SILTATION AND BANK EROSION**

The Contractor shall arrange his operations to minimize siltation and bank erosion on construction sites and on existing or proposed watercourses and drainage ditches.

**G-14.02 EXISTING FACILITIES**

The work shall be so conducted to maintain existing facilities in operation insofar as is possible. Work shall be scheduled to minimize bypassing during construction. Requirements and schedules of operations for maintaining existing facilities in service during construction shall be as described in the Special Provisions.

**G-14.03 USE OF CHEMICALS**

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

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## **SPECIFIC PROVISIONS FOR WATER**

### **S-1.01 GENERAL**

The Specific Provisions are intended as modifications or supplements to Instructions to Bidders, General Provisions and Agreement.

The City of Tampa reserves the right to require the Contractor to change his "Contractor Superintendent" at any time.

### **S-2.01 DEFINITIONS**

Add or amend the Definitions in Article 1.02 of the Agreement to these documents as follows:

"Department"

Add the following: "Whenever the word "Department" is used in the water portion of the Contract Documents, it shall mean the "City of Tampa Water Department".

"Owner" as it is referred to in the Water Specifications shall mean the City of Tampa Water Department.

"Red-line Drawing" refers to drawing maintained by the Contractor depicting changes (as constructed) from original plans.

"Construction Engineer" as it is referred to in the Water Specifications shall mean the Engineer designated by the City of Tampa's Contract Administration Department Construction Management section.

### **S-3.01 APPLICABLE CODES OR STANDARDS**

When words that have a well known technical or trade meaning are used to describe work, materials or equipment, such words shall be interpreted in accordance with such meaning.

When reference is made to codes or standards of organizations as outlined in Section G-4.03 of the General Provisions, it shall mean the latest revision thereof. However, no provision of any reference standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall change the duties and responsibilities of the City, Engineer or Contractor, or any of their agents or employees from those set forth in the Contract Documents.

### **S-4.01 LICENSES AND PERMITS**

If not previously acquired by the Department, the Contractor must obtain at his own expense, all construction-related permits, licenses, or other legal authorization necessary for the execution of each project or work order issued by the Department. Where applicable (project work results in one acre or more of disturbed earth) the Contractor shall file a Notice of Intent (NOI) to access the generic NPDES permit administered by the Florida Department of Environmental Protection

(FDEP). All document preparation, monitoring, reporting and other compliance with the NOI requirements shall be the responsibility of the Contractor and no separate payment shall be made.

The Contractor must comply with all regulations, building and construction codes as may be required by law. Copies of all permits must be kept at the job site during construction. The Contractor shall comply with all the terms and requirements of the permits and will be held liable for the violation of any and all such permits.

The Contractor shall obtain a City of Tampa right-of-way permit. The Contractor shall provide traffic control plans to all right-of-way owners as required.

#### **S-5.01 ORDER AND TIME OF WORK**

The work shall be coordinated with the Department and shall be prosecuted in the order it directs. This applies to both locations and items of construction. Where any of the work requires an interruption of water service or water plant operation, permission must be received from the Department and the work performed at times designated by it. The Contractor shall not be allowed to file claims for extra compensation of work prescribed by the Department. The Contractor shall make whatever arrangements are necessary and provide temporary lines and connections where designated by the Department.

#### **S-6.01 DEFECTIVE MATERIALS**

All pipe, fittings, valves, etc., except as defined in the Water Specifications for this project, shall be furnished by the Contractor, and it shall be the responsibility of the Contractor to examine each item to ensure that it is new, unused, and in first class condition. Should a defect be discovered after the item has been placed in the trench, the replacement will be at the Contractor's expense. It will further be required of the Contractor that materials be hauled in a safe and careful manner to avoid possible damage. Should any damage be done, the Contractor shall be fully responsible. Materials may be stored along the installation routes in a manner acceptable to the Department.

Any materials that are furnished by the Department to the Contractor shall be obtained at the Department's storage yard. The Contractor shall furnish all labor and equipment necessary to load, transport, and unload the materials in the manner directed by the Department.

Materials accepted by the Contractor must be signed for by his authorized representative. After acceptance, the Contractor will be held accountable and responsible for the materials. No materials will be issued or returned without a written directive from the Department.

#### **S-7.01 TEMPORARY FACILITIES AND CONTROLS**

##### **A) Temporary Water Supply**

In lieu of the requirements outlined in Article G-7.01 of the General Provisions, all reasonable amounts of water required by the Contractor for the water main testing and flushing under this agreement will be furnished by the City from the existing water system without cost to the Contractor. The Contractor shall request temporary hydrant meters with backflow prevention

devices when connecting to existing water system hydrants. A security deposit for the meter is required. The deposit will be returned when the meter is returned to the Contractor. City Crews will install the meter with backflow-preventer on the hydrant. The Contractor shall make any necessary water supply connections at his own expense at a point designated by the City. These connections shall be maintained by the Contractor, who shall furnish all pipe, valves, and such other equipment necessary or required. Temporary piping may run above ground when there is no possibility of traffic, and it can be done safely. Otherwise, it must run underground and in such manner as to meet the approval of the City. No water shall be wasted.

At the discretion of the City, unnecessary waste of water after notification will be cause for use of water to be discontinued. After temporary lines have served their purpose, they shall be removed by the Contractor and all connections closed or plugged to the satisfaction of the City.

### **S-8.01 MAINTENANCE AND RESTORATION OF JOB SITE**

The Contractor shall conduct his operations in such a manner that will result in a minimum of inconvenience to occupants of adjacent homes and business establishments and shall provide temporary access as directed or as conditions in any particular location may require as determined by the Engineer. All restoration must be performed to an equal or better condition than that which existed prior to construction.

Good housekeeping on this project is extremely important and the Contractor will be responsible for keeping the construction site neat and clean, with debris being removed daily as the work progresses or as otherwise directed by the Engineer. Good housekeeping at the job site shall include: removing all tools and temporary structures, dirt, rubbish, etc.; hauling all excess dirt, rock, etc. from excavations to a dump provided by the Contractor; and all clean-up shall be accomplished to the satisfaction of the Engineer. Immediately after construction is completed in an area or part thereof (including restoration), barricades, construction equipment and surplus and discarded materials shall be removed by the Contractor.

In the event that the timely clean-up and restoration of the job site is not accomplished to the satisfaction of the Engineer, the Engineer may make arrangements to effect the necessary clean-up by others. The Contractor shall be back-charged for these costs. If such action becomes necessary on the part of and in the opinion of the Engineer, the Department shall not be responsible for the inadvertent removal from the work site of materials which the Contractor would not normally have disposed of had he affected the required clean-up.

At the completion of each workday, the Contractor shall fill all open trenches and pits. Trenches and pits may remain open only if the Contractor has obtained permission from the appropriate permitting agency and all protection and warning devices are in place in working order.

The Contractor shall replace all open cut road pavements with a temporary compacted surface capable of supporting sustained vehicular loads as soon as possible once the trench or pit has been filled and compacted in 6-inch lifts. The temporary surface shall be maintained by the Contractor at the elevation of the adjacent road surfaces.

The Contractor is responsible for the security of all tools, materials and equipment required for this project and must make all arrangements for safeguards he may deem necessary. The City

will assume no liability for any such security or losses resulting from lack of security.

### **S-9.01 CONTRACTOR'S SCHEDULE**

The Contractor shall submit a weekly schedule to the Construction Engineer. The weekly schedule shall indicate his proposed water work plan for the forthcoming week. Such shall be delivered to the Contract Administration Dept., Construction Management Div. - Water, 3808 E. 26<sup>th</sup> Avenue, Tampa FL 33605 by noon of each Friday preceding the work plan week, unless other arrangements have been made for this submittal.

### **S-10.01 WATER MAIN AND SANITARY HOUSE CONNECTION CONFLICTS**

Where sanitary house laterals are damaged or broken due to water main construction, such laterals shall be restored by the Contractor according to the City of Tampa Sanitary Sewer Department's specifications and to the satisfaction of the Engineer. No extra compensation shall be paid for this work.

### **S-11.01 LINES AND GRADES OF WATER MAIN INSTALLATION**

In addition to requirements of Section 8 of the General Provisions, the Contractor is responsible for confirmation of the location of the pipe installation both horizontally and vertically where stated on the plans. These locations are indicated by station and offset. Any deviation from the plans shall be documented by confirmation of vertical and horizontal locations.

All elevations shall be referenced to the following datum: NGVD88

### **S-12.01 NOTICE AND SERVICE THEREOF**

All notices, which shall include demands, instructions, requests, approvals, and claims, shall be in writing.

Any notice to or demand upon the Contractor shall be sufficiently given if delivered to the office of the Contractor specified in the bid (or to such other office as the Contractor may, from time to time, designate to the Department in writing), or if deposited in the United States mail in a sealed, postage-prepaid envelope, or delivered, with charges prepaid, to any telegraph company for transmission, in each case addressed to such office.

All notices required to be delivered to the Department shall, unless otherwise specified in writing to the Contractor, be delivered to the Contract Administration Dept., Construction Management Div. - Water, 3808 E. 26<sup>th</sup> Avenue, Tampa FL 33605, and any notice to or demand upon the Department shall be sufficiently given as delivered to the office of the Engineer, or if deposited in the United States mail in a sealed, postage- prepaid envelope, or delivered with charges prepaid to any telegraph company for transmission, in each case addressed to said Engineer or to such other representative of the Department or to such other address as the Department may subsequently specify in writing to the Contractor for such purposes.

Any such notice or demand shall be deemed to have been given or made as of the time of actual delivery or (in the case of mailing) when the same should have been received in due course of

post or (in the case of telegram) at the time of actual receipt, as the case may be.

### **S-13.01 ENVIRONMENTAL PROTECTION**

The Contractor will be held liable for the violation of any and all environmental regulations and permit conditions. Violation citations related to environmental regulations and permit conditions carry civil penalties and, in the event of willful violation, criminal penalties. The fact that the permits are issued to the City does not relieve the Contractor in any way of his environmental obligations and responsibilities.

The Contractor shall evaluate and assess the impact of any adverse effects on the natural environment which may result from construction operations and shall operate to minimize pollution of air, ground or surface waters and vegetation and afford the neighboring community the maximum protection during and upon completion of the construction. The Contractor shall comply with Article 14.01 of the General Provisions and submit a plan to the Engineer for review and acceptance prior to implementation of the plan. Such plan can be combined with other control plan submittals and shall address protective measures to be taken along the route during pipeline construction.

The Contractor shall take sufficient precautions to prevent pollution of streams, lakes, ponds and other water sources with fuels, oils, bitumen, calcium hypochlorite (HTH) or other harmful materials. He shall conduct and schedule his operations so as to avoid pollution or siltation of streams, lakes, etc., including the use of silt barriers, straw bales or other related control methods, as outlined in the FDOT Standard Specifications. Where there is a high potential for erosion, the Contractor shall not expose, by construction operations, a larger area of erosive land at any one time than the minimum necessary for efficient construction operations, and the duration of exposure of the uncompleted construction to the elements shall be as short as practicable. Erosion control features shall be constructed concurrently with other work and at the earliest practicable time.

### **S-14.01 USE OF PRIVATE PROPERTY**

In accordance with Section 10, Paragraph G-10.07 of the General Provisions, all construction activities necessary to complete the project in accordance with the plans and specifications shall be confined to public rights-of-way, unless the Contractor makes specific arrangements with private property owners for his use of their property. The City assumes no responsibility for damage to private property in such instances. The Contractor is responsible for protection of private property abutting the work areas on this project.

### **S-15.01 STANDARD DETAILS**

In addition to the various Water Details included in the plans, the current City of Tampa Water Department Standard Construction Details shall apply to this work, if applicable.

### **S-16.01 MAINTENANCE OF CONTINUOUS WATER SERVICE**

At the conclusion of every work day, the Contractor is responsible for ensuring that all water

customers within his effective work area are in service. If a water customer contacts the Department to advise that they have no water service and it is determined to be within the Contractor's work area, the Contractor will be notified of the interrupted service through the Department dispatcher and/or Inspection Division. Upon notification, the Contractor must mobilize to the site and reinstate the customer's water service.

If the Contractor fails to mobilize his forces to make the repairs, the Department will mobilize its own forces to reinstate the customer's water services. In this event, the Contractor shall be charged a five hundred dollar (\$500.00) flat rate fee plus actual direct department costs for labor, materials, and equipment used to reinstate the water service. The five hundred-dollar fee and Department cost will be charged for each additional service reinstated. The amount charged will be deducted from the Contractor's payment.

### **S-17.01 SHUTDOWNS**

Unless otherwise approved by the Engineer in an emergency situation, scheduled shutdowns may only occur on Mondays, Tuesdays and Wednesdays. The Contractor shall notify the Engineer at least two weeks in advance of the need for a scheduled shutdown.

Where connections are made to the existing mains, or where other occurrences require a shutdown, the Contractor shall work with the City to perform the work necessary to complete the shutdown. The City will make every effort in advance to perform pre-valve shutdowns, but there are no guarantees as to whether or not all valves will properly seat in order to guarantee a complete shutdown. In the event of an emergency, the Contractor shall immediately notify the City.

At the Pre-Construction Meeting to be held with the Water Department (required) the Contractor will be notified of the policies and procedures to coordinate with the Water Department for shutdowns. Preliminary outline of these procedures is provided in the Water Technical Specifications for this project, in Sections T1.02A and T1.02B.

### **S-18.01 GUARANTEES, WARRANTIES, BONDS**

The Contractor, together with his Surety, shall guarantee all the work furnished under the Agreement for a period of one full year from the date of final acceptance, as outlined in Article 6.04 of the Agreement, or within such longer period of time as may be prescribed by law, or by special guarantee or provision of the Contract Documents. Under this guarantee, the Contractor agrees to make good without delay, at his own expense, any failure of any part of the work due to faulty materials or manufacture, or the failure of any equipment furnished to perform satisfactorily all the work within the limits of the Agreement. He will also make good any damage caused by such failure. Any such repair work shall receive a similar guarantee for a similar period of time. This guarantee shall be exclusive of manufacturer's guarantees or warranties exceeding this period.

### **S-19.01 WORKER SAFETY**

The Contractor shall comply with all requirements in OSHA 29 CFR 1910.146 and FAC 38I 20.035 for confined spaces and confined space entry.

**S-20.01 ASBESTOS REMOVAL** *(If required. Asbestos pipes are not expected in this project)*

The Contractor shall secure the services of a State of Florida licensed asbestos abatement contractor for the performance of any and all work involving the cutting, removal, transportation and proper disposal of asbestos containing materials.

The asbestos abatement work must be performed by a contractor having not less than 10 years experience in work of this type and magnitude. The asbestos abatement contractor must submit a listing of the last ten (10) projects performed with the name and telephone number of a contact person. Additionally, the asbestos abatement contractor shall submit a certified letter indicating compliance with the following:

- a) Job supervisor's names and confirmation of State of Florida licensure, valid for the period of the contract.
- b) Pollution Liability Insurance with a minimum limit of \$1,000,000 bodily injury and property damage combined single limit each occurrence to cover its liability as an asbestos abatement contractor. Such policy shall be issued in accordance with the insurance specifications contained in this bid, including naming the City and Contractor (if different than the asbestos abatement contractor) as additional insureds.
- c) Statements indicating no pending lawsuits.
- d) An acceptable disposal facility is required. Documentation must be submitted to the City Engineer that the proposed disposal site is approved to receive and deposit asbestos waste materials. After deposition, receipts must be submitted to the Engineer to demonstrate that the waste was properly disposed of.

The submittal shall be in sufficient detail to show compliance with the above qualification specification.

**S-21.01 CONTRACTOR'S PRESENCE**

The Contractor or his authorized representative shall be present at the job site at all times while the work is in progress. Contractor shall make readily accessible copies of both the Contract Documents and the latest approved working drawings at the job site.

**S-22.01 AS-BUILT (RECORD) DRAWINGS**

At no additional cost to the Department, the Contractor shall provide to the Construction Engineer acceptable pdf and hard-copy of as-built (record) drawings of the constructed water relocations. These shall be in addition to any as-built plans being compiled and provided to the Primary Owner Department on this project (the Transportation Department) or those kept by field inspectors employed by the City of Tampa. Requirements for Water Department as-builts are provided in Section T-5.0 RECORD DRAWINGS in the project's Water Technical Specifications.



**CONTRACT PAY ITEMS FOR WATER CONSTRUCTION**

**C1.00 General**

The Contractor shall receive and accept the compensation for potable water construction provided in the Proposal and the Agreement as full payment for furnishing all materials and all labor, tools and equipment, for performing all operations necessary to complete the Water work under the Agreement, 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 Engineer, 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 Department.

It is the intent of these contract documents that any cost for which compensation is not directly provided by a bid item shall be prorated and included in the bid item for which they are required. Failure of the Contractor to follow this procedure shall be basis for rejection of his bid.

The prices stated in the Bid Proposal include all costs and expenses for taxes, labor, equipment, commissions, transportation charges and expenses, patent fees and royalties, labor for handling material during inspection together with any and all other costs and expenses for performing and completing the work as shown on the plans and specified herein. The basis of payment for any item at the unit price shown in the Proposal shall be in accordance with the description of that item in this Section.

No separate payment will be made for the following items, and the cost of such work shall be included in the applicable contract pay items of work, including separate mobilization/ demobilization charges for compliance with FDEP or any other agency:

1. Separate mobilization;
2. Clearing and grubbing;
3. Excavation, including necessary pavement/slab removal;
4. Shoring and sheeting as required by OSHA trench excavation safety standards unless specifically provided for in a pay item;
5. Dewatering and proper disposal of all water unless specifically provided for in a pay item;
6. Backfill and proper compaction, including suitable fill;
7. Grading;
8. Replacement or restoration of paved or unpaved roadways, grass and shrubbery plots outside of established pay limits for excavations;
9. Temporary facilities and controls during construction such as water/sanitary facilities, traffic control, informational signs and environmental protection, unless specifically provided for in a pay item;
10. Providing and maintaining silt barriers for drainage structures and silt fences for the duration of the project;

11. Removing and legally disposing of waste material due to construction, including but not limited to valve boxes that need to be removed from abandoned water mains;
12. Cleanup and restoring the job site to its original condition, which includes but is not necessarily limited to restoring the ground surface to its original grade;
13. Testing and placing system in operation, including re-mobilization for FDEP testing;
14. Any material and equipment required to be installed and used for the tests;
15. Maintaining the existing quality of service during construction, including flushing mains that are cleared but not put into service after the bac-T tests are complete;
16. Repair of sanitary sewer house laterals and water services damaged during construction;
17. Repair of water services damaged during construction;
18. Adjusting new or existing water meter boxes to grade which are affected by construction;
19. Appurtenant work as required for a complete and operable system;
20. Coordination with all Federal, State and Local agencies and utilities;
21. Cutting of existing or new pipe for purposes of abandonment or installation of new pipe, valves or fittings;
22. Tree trimming as required by the City of Tampa Parks Department or any other agency unless specifically provided for as a contract item;
23. Verification of pipe elevation as stated in Section 8 of the General;
24. Repair of private irrigation systems damaged during construction;
25. Furnishing and installing suitable temporary fences, as directed by the Engineer, to adequately secure areas protected by a permanent fence when that permanent fence must be removed. The temporary fence shall remain in place until the permanent fence is replaced;
26. Maintaining red-line drawings of changes to construction plans, to be submitted for FDEP clearance;
27. Furnishing record drawings based on the Contractor's redline drawings, in AutoCAD 2017 or higher and one set of drawings on paper. The City will provide the AutoCAD plans developed for the design for Contractor use developing Water record drawings.
28. Furnishing and installing polyethylene encasement per Standard Detail 2.05 for all buried ductile iron pipe, all fittings and tapping sleeves.
29. Furnish and installing mechanical joint restraints connecting mechanical joint fittings and valves to water mains.

The Contractor's attention is again called to the fact that the quotations for the various items of work are intended to establish a total price for completing the work in its entirety. Should the Contractor feel that the cost for any item of work has not been established by the Proposal or Contract Pay Items, he shall include the cost for that work in some other applicable bid item, so that his proposal for the project does reflect his total price for completing the work in its entirety.

Following final payment by the City, the Contractor shall maintain the surface of the unpaved trenches, shrubbery, fences, sod, and other surfaces disturbed for a period of one (6) months thereafter and shall maintain the repaved areas, curbs, gutters and sidewalks, trees, if replaced by the Contractor, for one (1) year after acceptance. The cost of maintaining the restored areas is considered incidental to the cost

of restoring the areas disturbed by the Contractor. These costs shall be prorated and included in the cost for the bid item for which it is required.

The quantities for payment under this Agreement shall be determined by actual measurement of the completed items, in place, ready for service and accepted by the City, in accordance with the applicable method of measurement therefore contained herein. A representative of the Contractor shall witness all field measurements.

All water construction work shall be in accordance with the Water Plans, Specifications and Standard Details provided in this project's Contract Documents. All materials installed shall be in accordance with the included Water Materials Specifications.

## **C2.00 Pipeline Installation**

### **C2.10 Ductile Iron Pipe**

The Contractor shall provide all labor, equipment, and materials to furnish and install the proposed ductile iron pipe.

Furnishing and/or installing ductile iron pipe shall include, but may not be limited to:

1. Furnishing all construction layouts;
2. Field locating all utilities to confirm horizontal and vertical location in areas of possible conflict;
3. Furnishing all labor equipment and materials to excavate the trench;
4. Maintaining the trench which shall include dewatering and sheeting and bracing as required by OSHA or as directed by the Engineer standards unless specifically provided for in a pay item;
5. Cleaning dirt and foreign material from within pipe and bell;
6. Beveling field-cut joints and pipe shorts;
7. Furnishing and installing EPDM gaskets for all DIP;
8. Furnishing and installing Department approved pipe and any pipe shorts as part of the pipeline;
9. Furnishing and installing blue for polyethylene encasement per standard detail 2.05;
10. Furnishing and installing 4, 6, 8, or 12-inch nominal diameter ductile iron pipe at various depths;
11. Cleaning up and removing excess water main pipe and appurtenances;
12. Pressure testing the water main pipe;
13. Furnishing and installing temporary pipe short's valves and bends for full port flushing;
14. Furnishing and installing valve location protection devices per Standard Detail 3.05 whenever needed to keep valve locations visible;
15. Disinfecting the water main pipe and bacteriological testing;
16. Backfilling and compacting the trench;
17. Cleaning up and restoring the job site which shall include re-grading the terrain;

18. Removing and legally disposing all waste materials;
19. Installing push-on joint restraint gaskets for DIP (other than at MJ connections) as shown on the plans or as directed by the Engineer (note that additional compensation will be provided under appropriate Pay Items for furnishing push-on restraint gaskets).

Cover over pipe shall be defined as the vertical distance from the top of the pipe to the surface grade above the main. Trench depth shall be defined as the vertical distance from the bottom of the barrel of the pipe to the surface grade above the main.

Payment for connecting new water mains to existing water mains will be made utilizing the contract unit price for installing the fittings or valves used in the connection.

The cost to hydrostatically test and disinfect the ductile iron water mains shall be prorated and included in the pipeline construction unit prices. The prorated cost should include, but may not be limited to furnishing and installing all:

- 1) Material;
- 2) Labor;
- 3) Necessary pumps;
- 4) Recorder charts;
- 5) Gages (300PSIG limit, oil filled);
- 6) Chemicals;
- 7) Temporary valves;
- 8) Temporary plugs;
- 9) Sample taps, (including installation of brass dry main plugs after tap removal);
- 10) Blow off assemblies (including removal after disinfection is complete);
- 11) Dry main plugs;

necessary to pressure test and disinfect various sizes and depths of ductile iron pipe. Furthermore, no extra compensation shall be paid to the Contractor for:

1. Furnishing and installing brass, dry main plugs at the locations of all removed sample taps,  
or
2. Removing existing "end of line" or blow-off valves after the pipeline has been disinfected and prior to connecting the newly installed pipeline to the existing water main.

All temporary materials or materials not remaining in the ground after the completion of the disinfection and pressure testing shall remain the property of the Contractor.

The pipe quantities to be paid for under this section shall be based on the size and the horizontal distance in linear feet of ductile iron pipe measured along the top centerline of the pipe in place

complete and acceptable to the Engineer.

Payment shall be made under:

<u>Item No.</u>	<u>Description</u>	<u>Unit</u>
2102	Furnish and install 6" ductile iron pipe	LF
2104	Furnish and install 8" ductile iron pipe	LF
2106	Furnish and install 12" ductile iron pipe	LF

**C2.20 Furnish and Install HDPE Pipe by Horizontal Directional Drilling – N/A**

**C2.50 Removal and Abandonment of Pipe**

The Contractor shall provide all labor, equipment and materials to remove the abandoned pipeline and appurtenances (such as valves, fittings, and other materials) as designated on the plans or directed by the Engineer.

The removal of the abandoned pipe shall include, but may not be limited to:

1. Furnishing all equipment, labor, tools and equipment to excavate the trench;
2. Maintaining the trench;
3. Removing the abandoned pipeline and appurtenances;
4. Furnishing and installing grout to plug any abandoned open-end pipe;
5. Furnishing and installing a cap or plug and restrain adequately to withstand a working pressure of 150 psi, on all in-service open end pipe;
6. Transporting the removed pipe and appurtenances, without delay, to a location designated by the Engineer;
7. Unloading the removed pipeline and appurtenances at the designated location;
8. Cutting of any existing pipe to accommodate abandonment;
9. Backfilling and compacting the trench;
10. Cleaning up and restoring the job site which shall include re-grading the terrain; and
11. Removing and legally disposing of all waste materials.

Payment shall be made based on the size and horizontal distance in linear feet of pipeline removed measured along the top centerline. At the Department's option, all abandoned pipe and appurtenances shall remain the property of the Department. If the Department opts not to remain owner of the removed facilities, then the Contractor shall remove and properly dispose of the facilities at his expense.

Payment shall be made under:

<u>Item No.</u>	<u>Description</u>	<u>Unit</u>
2500	Remove 1" - 3" diameter abandoned pipe	LF
2501	Remove 4" - 12" diameter abandoned pipe	LF

**C2.60**     **Cutting and Plugging**

The Contractor shall provide all labor, equipment and materials to cut and plug pipe as designed on the plans or as directed by the Engineer. To cut and plug pipe shall include, but may not be limited to:

1. Excavating and maintaining the trench;
2. Performing a minimum of two complete cuts of the pipe to facilitate the plugging.
3. Removing of pipe or appurtenances to allow for the installation of plugs on 8" or less open ends of pipe;
4. Furnishing and installing grout to plug any abandoned open end(s) pipe;
5. Furnishing and installing cap(s) or plug(s) and restraints to adequately withstand a working pressure of 150 psi, on all in-service open end(s) of pipe;
6. Backfill and compact the trench;
7. Cleaning up and restoring the job site which shall include re-grading the terrain; and
8. Removing and legally disposing of all waste materials.

Payment shall be made for each cut and plug accomplished and accepted by the Engineer.

Payment shall be made under:

<u>Item No.</u>	<u>Description</u>	
2600	Cut and Plug 3" and smaller	EA
2601	Cut and Plug 4", 6" and 8" Pipe	EA

**C2.70**     **N/A**

**C2.80**     **Incidental Tapped Connections - N/A**

**C3.00**     **Thrust Restraint for Push-on Pipe Joints**

The Contractor shall provide for all labor, equipment and materials to completely furnish and/or install push-on pipe joint thrust restraint. The furnishing and installation of the thrust restraint shall include but not be limited to:

1. Excavating the trench;

2. Maintaining the trench that shall include dewatering and bracing and sheeting where required or as directed by the Engineer;
3. Furnishing of approved push-on restraint EPDM rubber gasket-type restraining devices (gaskets with stainless steel locking segments vulcanized into the rubber) on new push-on ductile iron pipe;
4. Furnishing and installing approved restraining devices on joints of existing pipe;
5. Backfill and compact the trench;
6. Cleaning up and restoring the job site which shall include re-grading the terrain; and
7. Removing and legally disposing of all waste materials.

Payment shall be made under:

<u>Item No.</u>	<u>Description</u>	<u>Unit</u>
3042	Furnish & install 8" bell or mechanical joint restraints on existing pipe	EA
3043	Furnish & install 12" bell or mechanical joint restraint on existing pipe	EA
3072	Furnish 8-inch push-on joint restraint gaskets	EA
3073	Furnish 12-inch push-on joint restraint gaskets	EA

**C4.00**     **Fittings**

The Contractor shall provide all labor and equipment to completely install plugs, caps, bends, sleeves, reducers, tees, crosses, and offsets. The installation of ductile iron fittings shall include, but not be limited to:

1. Excavating the trench;
2. Maintaining the trench which shall include dewatering and bracing and sheeting where required or as directed by the Engineer;
3. Furnishing and installing the appropriate fitting;
4. Furnishing and installing MJ restraint devices required for connection of fitting to pipe;
4. Backfilling and compacting the trench;
5. Cleaning up and restoring the job site which shall include re-grading the terrain; and
6. Removing and legally disposing of all waste materials.

Costs of the mechanical joint (MJ) restraint devices required for connecting fittings (and valves) to pipe shall be included in the cost of the fitting/valve. Additional compensation shall not be provided for MJ restraints – except as required for restraint of existing-pipe joints.

Payment will be made for the number of each size and type of fittings installed and incorporated into the piping system complete, working, and operating to the satisfaction of the Engineer.

Payment shall be made under:

<u>Item No.</u>	<u>Description</u>	<u>Unit</u>
4005	Furnish and install 6" ductile iron MJ Bend, Sleeve	EA
4009	Furnish and install 8" ductile iron MJ Bend, Sleeve	EA
4010	Furnish and install 8" x 6" ductile iron MJ Tee	EA
4013	Furnish and install 12" ductile iron MJ Bend, Sleeve or Reducer	EA

**C5.00 Fire Hydrants**

The Contractor shall provide all labor, equipment and specified materials to completely furnish and/or install full and complete fire hydrant assemblies on new and existing water mains as shown on the construction plans or as directed by the Engineer.

The "standard hydrant assembly" to be furnished is 10 LF or less of 6" DIP, hydrant elbow, and hydrant barrel extension and hydrant barrel as shown in Standard Detail 4.01.

Hydrant assembly installation shall include, but may not be limited to:

1. Excavation of hydrant assembly trench;
2. Maintaining the trench that shall include dewatering, bracing and sheeting where required or as directed by the Engineer;
3. Anchoring the hydrant to existing or new main;
4. Furnishing and installing of up to and including ten (10) feet of 6-inch ductile iron pipe;
5. Removing any plugs, caps, restraining devices, etc. from existing water mains;
6. Furnishing and installing all mechanical thrust restraint beginning at the hydrant valve as required in the Technical Specifications or as directed by the Engineer;
7. Furnish and installing polyethylene encasement for all underground pipe and fittings;
8. Furnish and install hydrant in the plumb position with 4.5' clearance in the back and 7' clearance in the front and on each side from walls, poles and obstructions;
9. Furnishing and installing a concrete thrust collar around the barrel of the hydrant and 12" below grade as shown in standard detail 4.01;
10. Furnishing and installing of a concrete "support block" under each hydrant;
11. Backfilling and compacting hydrant assembly trench;
12. Furnish high grade enamel OSHA yellow paint and paint hydrant barrel as required in the Technical Specifications;
13. Furnishing high grade enamel OSHA green paint and paint the hydrant bonnet;
14. Furnishing and installing one blue, reflective pavement marker (RPM) in the street adjacent to the hydrant at a location to be determined by the Engineer. The RPM shall meet or exceed all provisions of the Florida Department of Transportation, Standard Specifications for Road and Bridge Construction, Section 706;
15. Pressure testing the hydrant assembly in conformance with these documents;
16. Furnishing and installing an approved blue Valve Curb Marker;



16. Backfilling and compacting the trench;
17. Cleaning up and restoring the job site which shall include re-grading the terrain; and
18. Removing and legally disposing of all waste materials.

The Contractor shall do all things necessary to completely install a fire hydrant assembly in accordance with the Technical Specifications, Standard Details or as directed by the Engineer. Payment will be based on the number of hydrant assemblies incorporated into the pipeline system complete and working to the satisfaction of the Engineer. Payment for tees, valves, taps, and fittings will be made utilizing the appropriate contract bid item. Separate payment will be made for any 6-inch ductile iron pipe in excess of 10 feet connecting the hydrant gate valve to the hydrant.

In addition, it will be the Contractor's responsibility to determine the correct size (bury depth) of each hydrant installed so that the requirements of the Technical Specifications are satisfied. Any hydrant not installed to the proper grade shall be replaced with one of the correct size by the Contractor at his expense prior to final approval and acceptance.

Fittings required because of contractor convenience, (i.e. installed because the contractor elected to install a shallow bury hydrant), if approved by the Engineer, shall be furnished and installed at the contractor's expense.

Payment shall be made under:

<u>Item No.</u>	<u>Description</u>	<u>Unit</u>
5000	Furnish and install full std. fire hydrant assembly on new or existing mains	EA

**C5.20 Fire Hydrants (Removal of Existing)**

The Contractor shall provide all labor, equipment, and material for removal and salvage of each existing fire hydrant assembly on an existing water pipeline. Hydrant removal and salvage includes, but may not be limited to:

1. Excavating the hydrant pit;
2. Furnish and install restraining devices anchoring the hydrant shut off valve to the pipeline tee;
3. Remove hydrant from hydrant lead;
4. Furnish & install thrust block (if required) behind cap or plug;
5. Remove hydrant protection post(s);
6. Backfilling and compacting the hydrant pit;
7. Cleaning up and restoring the job site which shall include re-grading the terrain;
8. Removing and legally disposing of all waste materials;
9. Transporting the removed hydrant without delay to the location designated by the Engineer or legally disposing the hydrant; and

10. Unload the removed hydrant at the designated location.

Contractor shall be paid for each hydrant removed, salvaged, returned or disposed. All hydrants removed shall remain the property of the City unless otherwise directed by the Engineer. If the City opts not to remain the owner, the Contractor shall remove and properly dispose of the hydrant at his expense. The installation of the plug or cap and thrust block if required shall be paid for using the appropriate bid item.

Payment shall be made under:

<u>Item No.</u>	<u>Description</u>	<u>Unit</u>
5200	Remove and salvage hydrant	EA

**C6.00**    Valves

The Contractor shall provide all labor, equipment and materials to completely furnish and install 2-inch through 12-inch gate valves or tapping valves including all accessories and incidentals. The valve installation shall include, but may not be limited to:

1. Excavating the trench;
2. Maintaining the trench that shall include dewatering and bracing and sheeting where required or as directed by the Engineer;
3. Furnishing and installing an MJ gate valve in a mainline of DIP with an approved valve box, or a tapping valve on a tapping sleeve with a valve box, with appropriate connecting MJ restraints;
4. Furnishing and installing an approved blue Valve Curb Marker for each valve installed;
5. Backfilling and compacting the trench;
6. Furnishing, forming and pouring a 6-inch thick concrete pad around each valve box installed in non-paved areas;
7. Furnishing paint and painting valve cover;
8. Cleaning up and restoring the job site which shall include re-grading the terrain; and
9. Removing and legally disposing of all waste materials.

Additional compensation shall not be provided for MJ restraint devices connecting valves to pipe.

Payment shall be made for the number of each size valve and valve box installed and incorporated into the piping system complete, working and operating to the satisfaction of the Engineer.

Payment shall be made under:

<u>Item No.</u>	<u>Description</u>	<u>Unit</u>
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6001	Furnish and install 6" gate or tapping valve and box on DIP	EA
6002	Furnish and install 8" gate or tapping valve and box on DIP	EA
6003	Furnish and install 12" gate or tapping valve and box on DIP	EA

**C6.10     Line Stops**

The Contractor shall furnish all labor, equipment, tools and materials to install line stops on existing water mains.

The line stop installation shall include but is not limited to:

1.     Excavating the trench;
2.     Maintaining the trench that shall include dewatering and bracing and sheeting where required or as directed by the Engineer;
3.     Furnishing and installing the line stop;
4.     Furnishing and installing polywrap on line stop appurtenances remaining on the pipe after the line stop is removed;
5.     Furnishing and installing reverse dead-man restraint with split wedge action restraints as shown in Standard 2.12B.
6.     Compacting soil in trench around dead-man and line stop to a minimum 90% modified proctor density;
7.     Excavating the trench to remove line stop;
8.     Backfilling and compacting the trench;
9.     Cleaning up and restoring the job site which shall include re-grading the terrain; and
10.    Removing and legally disposing of all waste materials.

Payment shall be made under:

<u>Item No.</u>	<u>Description</u>	<u>Unit</u>
6107	F&I 8" Line Stop on Existing Water Main	EA
6108	F&I 12" Line Stop on Existing Water Main	EA

Payment for reverse dead-man restraints shall be paid for under the appropriate items for split wedge action restraints and poured concrete thrust blocking.

**C7.00     Taps – for 4" and larger pipe – N/A**

**C7.10     Saddle Taps – for 3" and smaller pipe – N/A**

**C8.00 Water Meter And Fire Line Service Installation**

**C8.10 Metered Services Two-Inch and Less with Pipe Work**

The Contractor shall provide all labor, materials and equipment for the installation and/or transfer of 3/4" (single or dual service), 1", 1½", and 2" meters as specified, and issued in conjunction with a pipeline project.

Meter service lengths (as described in the pay items) are defined as follows:

- o 0-15' service line required from main to meter is up to 15' long
- o + 15-80' service line required is greater than 15', up to and including 80'

All water meters are existing, or will be furnished by the City.

Meter service installation shall include, but may not be limited to:

1. Excavating and maintaining the trench;
2. Making the appropriate size tap;
3. When directed by the Engineer or as indicated in the standard details, furnish and install an appropriately sized steel, PVC or HDPE sleeve under paved areas for long-side meter service by open cut, horizontal directional drilling/directional bore or "moling" as directed by the Engineer or as indicated in the standard details;
4. Furnish and install the appropriate size and type of corporation stop, high density polyethylene, any required service fittings, curb stop, meter box, and tail piece extension as designated by the Tampa Water Department's Technical Specifications;
5. On all long-side HDPE service lines, furnishing and installing two continuous 12-gauge wires along the top of the pipe, inside the sleeve. There shall be no dead ends and each locator wire shall be routed from the corporation to the meter box. Connections between wire ends shall be made using approved connectors at each end as shown in the standard details;
6. Installation of the appropriate sized, furnished, meter or transferring an existing meter to the new service line;
7. Backfilling and compacting of all excavations;
8. Clean-up and return the job site to its original condition which includes but is not limited to restoring the elevation of surface to its original grade;
9. Removing and legally disposing of all waste materials.

Payment shall be made for each meter service furnished and installed, and accepted by the Engineer.

Payment shall be made under:

<u>Item No.</u>	<u>Description for Services on PVCP, DIP, OR CIP</u>	<u>Unit</u>
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Contract 20-C-00039  
Armenia Avenue at SR 580\Busch Blvd.

8107	Furnish, tap & install 1" meter service (+ 15'-80')	EA
8128	Furnish, tap, & install 2" meter service (+ 15'-80')	EA

**TECHNICAL SPECIFICATIONS – WATER (CONSTRUCTION REQUIREMENTS)**

**T1.00      GENERAL REQUIREMENTS**

**T1.01      Summary of Work**

The Contractor shall have access to and inspect the project area prior to beginning construction and ascertain existing conditions as per Section I-2.01 of the Instructions to Bidders.

The work will include the furnishing of all services, labor, equipment and certain materials necessary for a complete installation of water lines and performed in a thorough and workmanlike manner, as outlined in Section G-1.02 of the General Provisions. All items implied, usually included, or required for the construction of a complete operating system shall be installed whether or not shown on the plans or specified herein. In general, pipe shall be provided with a minimum of 36 inches of cover.

The Contractor will preserve and protect all existing vegetation such as trees, shrubs and grass adjacent to the sites, as outlined in Sections G-9.02 and G-9.03 of the General Provisions, which do not reasonably interfere with the construction, as determined by the Engineer. It will be the Contractor's responsibility to give written notification, at least 3 days prior to commencement of construction, to any owners or occupants of properties along the construction route. This notification shall be about the pending construction, in order to allow the said owners or occupants an opportunity for removing from the work site any bushes, flowers, plantings, trees etc. they wish to save that are within the limits of construction. The Contractor will be responsible for all unauthorized cutting or damaging of trees and shrubs, including damage due to careless operation of equipment, stockpiling of materials or tracking of grass by equipment. The Contractor will be liable for, or will be required to replace or restore at no additional expense to the City, all vegetation not protected or preserved as required herein that may be damaged or destroyed.

City-owned utilities within project limits will include water, wastewater, drainage, and traffic signal cables. All other utilities present within City of Tampa rights-of-way are considered private utilities. Private utilities are responsible for locating their utilities prior to construction and, if required, relocating and/or temporarily supporting their utilities to allow the safe construction of the work under this contract. Private utilities must provide this service without charging a fee to the Contractor.

City-owned utilities and structures not shown on Contract Drawings to be removed and replaced or relocated shall be protected in place and utility service shall be maintained. Where temporary conflicts occur between existing City-owned utilities and the new construction, the Contractor shall protect in place or relocate said utilities and maintain utility service all to the satisfaction of the City. Utilities and structures shown on the drawings to be removed and replaced or relocated by the Contractor shall conform to the requirements of the applicable technical specifications.

Record drawings for existing gravity sewer and laterals along the project route are often not complete. The Contractor shall be prepared to immediately repair any active sewer lateral connection damaged during construction. If the location of an active sewer lateral conflicts with the proposed location of the water main, the Contractor shall immediately notify the City, who will direct the Contractor on how to resolve the conflict. The Contractor may be required to reroute the sewer lateral either over or under the proposed water main.

**T1.02      Coordination**

The Contractor shall provide for the complete coordination of the construction effort including the work of subcontractors, the effort of independent testing agencies and the interrelated work with the City where tie-ins to existing facilities are required.

It shall be the Contractor's responsibility to alert the Engineer at least two working days in advance of construction, to any conflicts or potential conflicts with the proposed work. Failure of the Contractor to review the job site and alert the Engineer to any conflicts shall relieve the City from compensating the Contractor for any cost arising from any remedial action necessary to resolve the conflict with the proposed work.

All water lines, storm drains, sanitary sewers, gas or other pipe, telephone or power cables or conduits, all individual service connections and all other obstructions, whether or not shown on the plans, shall be supported where adjacent to or crossing the new utility line excavation in a manner acceptable to the Department and the respective utility owner. Wherever existing utility structures or branch connections leading to sanitary sewers or to storm drains, or other conduits, ducts, pipes, or structures present obstructions to the grade and alignment of the pipe, they shall be permanently supported, removed, relocated, or reconstructed by the Contractor through cooperation with the owner of the respective utility, structure, or obstruction involved. In those instances where their relocation or reconstruction is impractical, a deviation from line and grade will be authorized and the changes shall be made in the manner directed by the Engineer.

Approximate locations of known water, sanitary, drainage, power and telephone installations along the route of the new water mains or in the vicinity of new work are shown according to the best information available at the time of preparation of the drawings, but do not purport to be absolutely correct, and must be verified in the field by the Contractor. The Contractor shall obtain the location, elevations, and dimensions of all existing utilities, structures, and other features affecting his work prior to construction. At least 1,000 feet ahead of construction, the subcontractor shall obtain the elevations of all utilities crossing the proposed water main and, where the required separations cannot be achieved, shall notify the Engineer, in order that necessary changes may be made to permit installation of new pipe, and actual locations be recorded for the City's record drawings.

In addition, careful coordination with the work of other contractors may be required if other work is underway within the project area.

Working adjacent to and crossing other utilities can be expected to be commonplace on this project. The Contractor, as outlined in Article G- 1.03 of the General Provisions, shall coordinate his construction schedule with the various utility companies as well as affected local agencies involved prior to starting the project along with a minimum of 48 hours of notice to when construction will commence in an area, in order to permit field location of utility lines prior to construction. A toll free number (811) is available to assist in such coordination efforts. This number is for the utility notification center, a program known as Sunshine State One Call of Florida, but may not totally represent all utilities involved in the construction area. The Contractor is responsible for contacting the utility notification center and to immediately notify the Contract Administration Department ( 635-3432) of the "Location Request Number" obtained.

The various agencies or utilities possibly affected by the work include but are not necessarily limited to the following:

City of Tampa  
Wastewater Department  
306 E. Jackson St. (390A6N)  
Tampa, FL 33602

Florida Dept. Transportation  
2820 Leslie Rd  
Tampa, FL 33619

DPW Traffic Transportation  
306 E. Jackson St., (290A4E)  
Tampa, FL 33602

Hillsborough County  
Planning & Development Mgmt. Dept.  
P.O. Box 1110  
Tampa, FL 33601

Hillsborough County Right of Way Management office  
5701 East Hillsborough Avenue  
Suite 1222  
Tampa, Florida 33610

All utilities shall be kept in operation except with the express written consent of the utility owner. It will be the Contractor's responsibility to preserve existing utilities. Any and all damage to existing utilities as a result of the Contractor's actions shall be repaired to the satisfaction of the utility owner and the City at the Contractor's expense.

Where connections are made to existing mains or other shutdowns are necessary, permission must be obtained and arrangements must be made with the Water Department for removing from service those mains that will be affected. Shutdowns must be held to a minimum in both number and duration, and accomplished at times acceptable to the Water Department. No valve or other control device on the existing system shall be operated by the Contractor except as detailed in the Specific Provisions, sections S-17.01 - Shutdowns. Additionally, any service meter that is temporarily removed, after being approved by the Water Department, shall be returned to the original service address from which it was removed.



**T1.02A Maintenance of Continuous Water Service**

Maintaining continuous water service means that water flows through a water main 24 hours a day seven days a week.

The intent of this project's Plans and Specifications is for isolated water main replacements to be installed as a continuous operation – not in a phased manner. Connections to existing water mains shall be done in a timely manner. At no time shall the flow of water running the length of the project be stopped except to reconnect to water mains that have been tested and cleared for potable water use.

Whenever the Department agrees to temporarily shut down a water main that has back-feed, the Contractor shall maintain water quality. To maintain water quality, the Contractor may be required to provide flushing hydrants at each dead-end and flush the main at three-day intervals as required to satisfy FDEP requirements. The water main shall be flushed for the duration required to remove two volumes of water from the dead end section. The Contractor shall obtain water samples as required to complete FDEP shutdown requirements. All costs for temporary cutting, required testing, and plugging water mains, and maintaining water quality shall be at the expense of the Contractor with no additional cost to the City.

**T1.02B Connections to Existing Systems**

The Department requires that its customers be kept in service at all times. If required by the customer, or if the shutdown exceeds the 4-hour window allowed for shutdowns, the Contractor must provide temporary service to customers whose service will be affected by a shutdown. Full outline of policies and procedures applicable to performing shutdowns will be provided at the Pre-Construction meeting with the Water Department.

The Department will allow shut down of customer services only when requested in writing from the Contractor. If customers are impacted by the shutdown, then the request must include why temporary services cannot be provided to customers.

When a shutdown is authorized by the Department and customers will have their water shut off, the Contractor must have pre-assembled all new piping except at the point of the tie-in including service lines being transferred to the new main. The entire pre-assembly shall be successfully pressure tested and bacteriological tested prior to the shutdown. The Contractor shall have sufficient crews on site to accomplish the shutdown in less than four hours.

Policies and procedures for scheduled service interruptions and/or shutdowns of City water mains include that the Contractor must provide two weeks advance notice in writing with a copy of the Atlas sheet where the water main is to be shutdown. If a shutdown cannot be performed as scheduled, then the Contractor must notify the Department five days in advance of the rescheduled shutdown so that the City can provide customers the full 72-hour advance notification of the shutdown.

To minimize the days customers are under boil water conditions, the Contractor shall provide required sampling immediately following placing the water main back in service. All samples must pass two consecutive days of sampling to be approved. In order to issue rescind boil water notices, the City must be notified immediately of passed sample results. Final testing results shall be kept in the job file and made available upon request to the Hillsborough County Health Department.

**T1.02C Existing Water Main Condition**

All water mains on this project are in working order. Removing pavement may compromise the structural integrity of the roadway. Use of heavy equipment in these areas could cause damage and/or leaks to the water mains. Excavating beneath these mains at their joints and disturbing these mains could cause leaks. Contractor shall be responsible for scheduling work such that the main is replaced prior to drainage and roadwork. Contractor is responsible for repairing damages to water mains once the pavement is exposed at no extra cost to the City.

**T1.03 Field Engineering**

Each element of the work is subject to review by the Engineer, prior to proceeding with the next element; however, this shall not relieve the Contractor of the responsibility for delivering to the City a project completed in conformance with the contract plans and specifications and guaranteed as stipulated.

**T1.04 Abbreviations and Symbols**

Various abbreviations and symbols may be used or referenced in these specifications and contract plans. Symbols are generally explained on the sheet of the plans entitled "Location Map, Legend and General Notes". Abbreviations commonly used, along with their full reference, are as follows:

- Cu.Yds. (CY) - Cubic Yards
- CIP - Cast Iron Pipe
- DIP - Ductile Iron Pipe
- DIPRA - Ductile Iron Pipe Research Association (formerly CIPRA)
- EA - Each
- ED - Each Day
- FDEP - Florida Department of Environmental Protection
- FDOT - Florida Department of Transportation

- FL - Flanged Joint
- HDD - Horizontal Directional Drilling
- HDPEP - High Density Polyethylene Pipe
- Lin. Ft. (LF) - Lineal Foot
- LS - Lump Sum
- mg/l - Milligrams per Liter
- MJ - Mechanical Joint
- MH - Man Hours
- NSF - National Science Foundation
- OSHA - Occupational Safety and Health Administration
- ppm - Parts per Million
- psi - Pounds per Square Inch
- PVCPC - Polyvinyl Chloride Pipe
- RPR - Resident Project Representative
- S.P. - Steam Pressure
- Sq. Ft. (SF) - Square Feet
- Sq. Yds. (SY) - Square Yards
- TN - Ton
- W.O.G. - Water, Oil, Gas
- NAVD88 - North American Vertical Datum 1988

**T1.05 Submittals, Shop Drawings, Product Data and Samples**

The Contractor shall submit 4 copies of shop drawings as stated in Article G-3.02 of the General Provisions, plus those copies necessary for his own requirements in accordance with Section 3 of the General Provisions.

The shop drawings shall have been checked and stamped approved by the Contractor and identified as the Engineer may require. This data shown in the shop drawings shall be complete with respect to dimensions, design criteria, materials of construction, and the like, to enable the Engineer to review the information required. The data shown on the shop drawings shall include, in addition to that specified in the General Provisions, reference to specification section, drawing number, item identification on catalog cuts and like information to expedite review. Incomplete submissions will be returned without action.

Items that are on the Water Department's pre-approved material list will not be required to go through the shop drawing submittal process, provided that the list of materials is submitted to and approved by the Engineer in advance of the start of construction.

The Engineer will review and return one (1) set of the shop drawings along with those sets submitted by the Contractor over and above the quantity required by Article G-3.02 of the General Provisions. The returned sets shall bear the Engineer's comments and shall be returned with reasonable promptness. The Contractor's stamp of approval on any shop drawing shall constitute a representation to the Engineer that the Contractor has either determined and verified all field construction criteria, materials, catalog numbers and similar data

or he assumes full responsibility for doing so, and that he has reviewed or coordinated each shop drawing with the requirements of the work, contract documents and technical specifications.

The Engineer's review of a shop drawing is only for general conformance with the design concept of the project, and shall not relieve the Contractor from his responsibility for and deviation from the requirements of the contract documents or technical specifications, unless the Contractor has, in writing, called the Engineer's attention to such deviation at the time of the shop drawing submission and the Engineer has given written approval to the specific deviation. Any review by the Engineer shall not relieve the Contractor from his responsibility for errors or omissions in the shop drawings.

One complete set of reviewed shop drawings, product data and samples shall be kept at the site at all times. During the work specified as shown on the shop drawings, the Contractor shall make no deviations from the reviewed drawings, and the changes made thereon by the Engineer, if any.

When required by the Engineer, shop drawings or product data shall be submitted for, but shall not be necessarily be limited to, the following:

- Ductile iron pipe and fittings, including restrained joint type,
- Gate valves,
- Tapping valves and sleeves,
- Fire Hydrants,
- Concrete mix design, reinforcing steel and pre-cast items, if used.
- Line Stops

Whenever a standard of quality is established by a reference specification, the Contractor shall submit a certificate by the manufacturer that the material supplied meets the requirements of both these technical specifications and the referenced specifications and standards.

### **T1.06 Quality Control**

In addition to the inspection and testing outlined in Section 5 of the General Provisions, compaction/density tests also shall be required.

For tests required by the Technical Specifications regarding soil compaction, asphalt testing and concrete cylinder strength, the Department will appoint and employ services of an independent firm to perform inspection and testing. The independent firm will perform inspections, tests, and other services specified individual specification Sections and as required by the Engineer. Reports will be submitted by the independent firm to the Engineer, in duplicate, indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents. The Contractor shall cooperate with the independent firm; furnish samples of materials, design mix, equipment, tools, storage and assistance as requested; notify Engineer and independent firm a minimum of 24 hours prior to expected time for operations

requiring services; and make arrangements with the independent firm and pay for additional samples and tests required for Contractor's use. Retesting required due to non-conformance with specified requirements shall be performed by the same independent firm at the direction of the Engineer. Payment for retesting will be charged to the Contractor by deducting inspection or testing charges from the Contractor's payment.

**T1.07     Materials and Equipment**

A) General

Materials and equipment incorporated into the work shall meet the requirements of Section 4 of the General Provisions and these specifications. The Contractor shall furnish satisfactory evidence of the quality and kind of materials and equipment as well as guarantees or warranties provided by the manufacturer. It will be necessary to submit a copy of all delivery tickets for materials used on the project, regardless of the basis of payment.

Materials, supplies or equipment to be incorporated into the work shall not be purchased by the Contractor or subcontractors subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.

All materials and equipment shall be applied, installed, connected, erected, used, cleaned, finished and conditioned in accordance with the instructions of the applicable manufacturer, fabricator or processor except as otherwise provided in the Contract Documents. At the time that any piece of equipment is placed in service or operation at the construction site, the Contractor shall arrange for a qualified representative of the manufacturer to be present for the purpose of inspecting, approving and adjusting the equipment installation.

He shall remain on the job to instruct the City's personnel in proper operation and maintenance and shall remain until the equipment is operating in a satisfactory manner.

B) Quality Standards

If a standard of quality for items of equipment is established by reference on the plans or in the specifications to specific manufacturer's products, materials or construction and/or fabrication, items of equipment shall equal or exceed the standard of the referenced product as outlined in Section G-4.05 of the General Provisions.

The Engineer shall be the sole judge of material or equipment equality. The burden of proof of equality rests with the Contractor. Qualities described and shown refer to minimum criteria the Engineer will use in considering equipment proposed for the project.

It is not the intent of the Contract Documents to function as proprietary specifications. Where a particular manufacturer make and model are cited and specifically required for interchangeability of parts and to match existing equipment, this has been stated in the specifications.

C) Transportation and Handling

Materials and equipment shall be loaded and unloaded by methods affording adequate protection against damage. Every precaution shall be taken to prevent injury to the material or equipment during transportation and handling. Suitable power equipment will be used and the material or equipment shall be under control at all times. Under no condition shall the material or equipment be dropped, bumped or dragged. When a crane is used, a suitable lift sling shall be used.

The crane shall be placed so that all lifting is done in a vertical plane. Materials or equipment skid loaded, palletized or handled on skidways shall not be skidded or rolled against material or equipment already unloaded.

Materials and equipment shall be delivered to the job site by means that will adequately support it and not subject it to undue stresses. Material and equipment damaged or injured in the process of transportation, unloading or handling shall be rejected and immediately removed from the site. They shall be replaced with materials that meet all requirements of the contract documents and are suitable to the Engineer.

D) Storage and Protection

Materials and equipment shall be stored in a manner and at a location acceptable to the Engineer to insure the preservation of their quality and fitness for the work and which precludes damage or injury and affords protection against weather staining, corrosion or vandalism. Skidded or palletized materials or equipment shall not be stacked. Electrical equipment shall be stored indoors or under cover. Sheet materials shall be stored in a manner that affords free drainage with no ponding of water. All equipment shall be stored in a secure area.

Replacement of materials or equipment damaged, destroyed or lost through improper, inadequate or careless storage shall be the Contractor's responsibility.

Stored materials and equipment shall be readily and easily accessible to facilitate inspection.

**T1.08**      Cleaning and Restoring

All damaged areas shall be repaired, and all excess earth and rubble removed. Any and all existing facilities and/or conditions shall be restored to original condition or better.

**T2.00**      CONSTRUCTION OF WATER MAINS AND APPURTENANCES

**T2.01**      Subsurface Investigation

The Contractor shall be responsible for having determined to his satisfaction, the nature and location of the work, and the ground conformation, the character and quality of the substrata, the types and quantity of materials to be encountered, the nature of the groundwater conditions, the character of equipment and facilities needed preliminary to and during the prosecution of the work, the general and local conditions and all other matters which can, in any way affect the work under this Agreement. The prices established for the work to be done will reflect all costs pertaining to that work.

The Contractor will notify the Engineer promptly in writing of any subsurface or adverse physical conditions at the site which differ materially from those that may be indicated by the Contract Documents or earlier subsurface information in accordance with Section I-2.01 of the Instructions to Bidders and Section G-2.04 of the General Provisions. The Engineer will promptly investigate the conditions and advise the Contractor in writing if further surveys or subsurface tests are necessary. If necessary, the Department will promptly obtain the necessary additional surveys and tests and furnish copies to the Contractor.

## **T2.02     Site Preparation**

### **A) General**

The construction site shall be cleared of all obstructions, stumps roots, and vegetation within the limits required for proper execution of the work in accordance with Section 110, FDOT Standard Specifications, latest edition, to a minimum depth of 12 inches.

Shrubbery, trees and plants shall be protected as required by the City of Tampa Parks Department ("Parks Department") or the agency having jurisdiction, as shown on the plans, or as directed by the Engineer. Where necessary to remove plantings in order to accomplish the work, such plantings shall be replaced. Trees will be transplanted when feasible, and when a successful transplant is probable. Plantings and trees shall be replaced before the work is accepted.

Foliage, trunks, and roots of trees to remain shall be barricaded by encircling with stakes and flagging at a distance equal to the branch spread or as required by the Parks Department. Stockpiling of materials and movement of equipment shall be avoided within this area. Interfering branches shall be removed without injury to trunks.

Trees, stumps, and large roots within the construction area shall be removed, unless otherwise directed. Topsoil shall be stockpiled for future use. Unsuitable materials shall be removed from the site and properly disposed of by the Contractor. All trees shall be preserved in their natural state unless their removal is directed by the Department. Trees within 20 feet of the construction line shall be protected as indicated on the plans or as directed by the Engineer. Trees with trunk diameters in excess of five inches (measured circumference three feet above ground level and divided by 3.14) shall be preserved unless:

- A. their removal is directed;
- B. they are located within areas scheduled to be paved; or
- C. they interfere with utility or pipe trench alignment.

All trenching performed adjacent to tree trunks shall be accomplished in such a manner as to maintain a minimum clearance of at least 10 feet between the pipe and the base of the tree trunks for trees 5 inches in diameter and larger. A minimum of 20 feet clearance shall be maintained for tree trunks classified a grand tree by the Parks Department. When trenching is to be performed closer than the above minimums, root pruning or other protective measures as directed by the Engineer may be required. Tree trimming and root pruning shall be performed by a competent tree specialist who carries proper insurance and is licensed by the City of Tampa.

**T2.03     Dewatering**

If subsurface water is encountered in trenching or structural excavation work, the Contractor shall adequately dewater the excavation at his expense. No additional payment shall be made for dewatering operations.

The contractor will be required to do any and all sampling that may be required to be in conformance with the NPDES discharge permit requirements, at no expense to the city.

Subsurface water shall be kept 2 feet or more below the working area until there is no danger of displacement of pipes or structures. All water collected and pumped shall be disposed of in a manner which will cause no health hazard, flooding or nuisance to the surrounding area and in a manner so as not to degrade the water quality of surrounding water or violate any environmental ordinances or requirements. Water containing debris, sand or heavy sediment shall not be discharged into the storm water system. All permits for the discharge of this water shall be obtained by the Contractor from the appropriate regulatory agency.

**T2.04     Trenching, Backfilling and Compacting**

Trenching shall be conducted to the limits and grades shown on the plans or as directed by the Department.

The Contractor performing trench excavation on this Contract shall comply with the Occupational Safety and Health Administration's (OSHA) trench excavation safety standards, 29 C.F.R., s.1926.650, Subpart P, including all subsequent revisions or updates to these standards as adopted by the Department of Labor and Employment Security (DLES) as well as The Florida Trench Safety Act as delineated in Florida Statute Chapter 553, Part III.

By submission of his bid and subsequent execution of this Contract, the Contractor certifies that all trench



excavation done within his control shall be accomplished in strict adherence with OSHA trench safety standards, including all revisions and updates to these standards as adopted by the Department of Labor and Employment Security, as well as to The Florida Trench Safety Act as delineated in Florida Statute Chapter 553, Part III.

The Contractor also agrees that he has obtained or will obtain identical certification from his proposed subcontractors that will perform trench excavation prior to award of the subcontracts and that he will retain such certifications in his files for a period of not less than three years following final acceptance.

The Contractor shall consider all available geotechnical information in his design of the trench excavation safety system.

Dewatering operations shall be maintained until pipe-laying is complete and the trench backfilled sufficiently to prevent movement or flotation of the pipe.

The use of trench-digging machinery will be permitted except in places where its operation will cause damage to other utilities, trees, buildings, or existing structures above or below ground, in which case hand-methods will be employed.

The trench width and trenching method may vary with, and depend upon the depth of the trench and the nature of the excavated material encountered; but in any case shall be of ample width to permit the pipe to be laid and jointed properly and the backfill to be placed and compacted properly. The minimum width of unsheeted trench, at the bottom where the pipe is to be laid, shall be one foot greater than the nominal diameter of the pipe, except by consent of the Department. The maximum clear width of trench and the trench support system shall be in accordance with OSHA requirements.

Where sheeting and bracing are used, the trench width shall be increased accordingly. Trench sheeting shall be cut off at a level of at least 1 foot above the top of the installed pipe and shall be left in place until the pipe has been laid, tested for defects, repaired if necessary, and until the earth around the pipe has been compacted to a depth of 2 feet over the top of pipe.

Unless otherwise specified, the trench shall be AWWA C600 Type 2 as shown on the Standard Details "Typical Trench, Bedding and Backfill Detail". The trench shall have a flat bottom conforming to the depth to which the pipe is to be laid. The pipe shall be laid upon sound soil, cut true and even, so that the barrel of the pipe will have equal bearing for its full length. Bell depressions of ample dimensions shall be dug at each joint to permit proper pipe jointing.

In the event the Contractor excavates below the elevation required without approval from the Department, he shall refill with approved material and thoroughly consolidate. If, in the opinion of the Engineer, the trench bottom cannot support the pipe, a further depth and/or width shall be excavated and refilled to pipe foundation grade or other approved means shall be adopted to assure a firm foundation for the pipe.

All excavated material shall be piled in a manner that will not endanger the work and that will avoid obstructing sidewalks and driveways. Gutters shall be kept clear or other satisfactory provisions made for street drainage. All material removed from the trench on an improved area shall be removed from the site by the Contractor at the Contractor's expense.

Material removed from an unimproved area may be reused if, in the opinion of the Engineer, it is suitable and if local conditions permit reuse. All materials suitable for reuse must be stored separate from the general excavated material. All backfill material must be approved by Engineer prior to placement. If replacement backfill is required, the Contractor must supply the material at his expense.

Backfill material shall be free from cinders, ashes, refuse, organic matter, boulders, rocks or stones, or other material that in the opinion of the Engineer is unsuitable. Rocks up to 6-inches in their greatest dimension may be used for backfill from 1 foot above the top of the pipe up to the subgrade of the pavement unless otherwise specified by the Engineer.

All trenches shall be backfilled by hand, from the bottom of the trench to the centerline of the pipe in layers of 6 inches. Compaction shall be performed by tamping. Backfill material shall be deposited in the trench for the full width on each side of the pipe. From the centerline of the pipe to the specified grade, the pipe shall be backfilled by hand or by approved mechanical methods.

Compaction and consolidation shall be done in accordance with the requirements of the agency having jurisdiction. Unless requirements of the agency having jurisdiction are more stringent, all compaction shall conform to the following:

A. Impervious (paved) Surface Areas

The space between the pipe and the trench sides shall be packed full by hand-shoveled earth, free from lumps, carefully deposited in layers not exceeding 6-inches in depth. Such material shall be placed equally on each side of the pipe, and at the same time tamped in a manner acceptable to the Department, until enough fill has been so placed and compacted to the centerline of the pipe. From this point to 12 inches above the pipe, backfill shall be placed and compacted in uniform loose lifts no greater than 6 inches to a density that is at least 98% of the maximum modified proctor density (as determined by the Modified Proctor Density Test Method (ASTM D-1557)). The balance of the soils backfilled from this point to the top of the trench shall be placed and compacted in loose lifts not to exceed 12 inches to a density at least 98% of the maximum modified proctor density.

B. Pervious (non-paved) Surface Areas

The space between the pipe and the trench sides shall be packed full by hand-shoveled earth, free from lumps, carefully deposited in layers not exceeding 6-inches in depth. Such material shall be placed equally on each side of the pipe, and at the same time tamped in a manner acceptable to the

Department, until fill has been placed and compacted from the bottom of the trench to the centerline of the pipe. From this point up to grade, backfilled soils shall be placed and compacted in uniform loose lifts no greater than 12 inches, to a density that is at least 95% of the maximum density as determined by the Modified Proctor Density Test (ASTM D-1557).

## **T2.05     Pipeline Installation**

### **A) General**

During shipping, delivery and installation of pipe and accessories, materials shall be handled in such a manner as to prevent any damage. Particular care shall be taken not to injure pipe coatings. All pipe, fittings, valves and other material shall be subject to inspection and acceptance by the Department after delivery and no broken, cracked, misshapen, imperfectly coated, or otherwise damaged or unsatisfactory material shall be used. When a defect is discovered, the damaged portion shall not be installed. With the Department's approval, cracked pipe shall have the defect cut off at least 12 inches from the break in the sound section of the barrel.

Installations shall be according to AWWA Standard C600 (ductile iron pipe), AWWA C605 (PVC pipe), AWWA C906 (PE pipe), AWWA Manual of Water Supply Practices M55 (PE Pipe Design and Installation), ASTM F2164-02 (Field Leak Testing of PE Pipe), pipe manufacturer's recommendations, and as described in these technical specifications. Disinfection of all water mains shall be in accordance with AWWA C651.

All connections to existing piping systems shall be made as shown or indicated on the plans after consultation and cooperation with the Department. No such connection shall be made until all requirements of these specifications as to tests, cleaning, flushing and disinfection of new work have been met, and the planned cut-in to the existing line has been approved by the Department. Where connections are made between new work and existing work, the connections shall be made in a thorough and workmanlike manner using proper fittings and specials. Some such connections may have to be made during off-peak hours if required by the Department.

### **B) Underground Pipelines**

Proper implements, tools and facilities satisfactory to the Department shall be provided and used. Pipe, fittings, valves and appurtenances shall be carefully lowered into the trench piece by piece. Under no circumstances shall piping materials be dropped or dumped into the trench. Pipe and fittings shall be carefully examined for cracks and other defects while suspended above the trench immediately before installation in final position. If damage occurs to any pipe, fitting, valve or piping accessory in handling, the damage shall be immediately brought to the Engineer's attention. The Engineer shall prescribe corrective repairs or rejection of the damaged items.

Lumps, blisters and excess coating shall be removed from the bell- and-spigot end of each pipe. The outside

of the spigot and the inside of the bell shall be wire brushed and wiped clean, dry and free from oil and grease before the pipe is laid. Pipe joints shall be made up in accordance with manufacturer's recommendations.

For DIP and PVCP, upon satisfactory excavation of the pipe trench and completion of the pipe bedding, a continuous trough for the pipe barrel and recesses for the pipe bells, or couplings, shall be excavated by hand digging. When the pipe is laid in the prepared trench, true to line and grade, the pipe barrel shall receive continuous, uniform support and no pressure will be exerted on the pipe joints from the trench bottom. All ductile iron pipe shall be wrapped in polyethylene encasement (polywrapped) as shown in the Standard Detail. The polywrap and tape shall be blue for potable water and green for sanitary sewer force mains.

Pipe manufactured from materials, which are classed as flexible for purpose of pipe design shall be bedded true to line and grade with uniform and continuous support from a firm base and installed in accordance with manufacturer's recommendations. Blocking shall not be used to bring the pipe to grade. Backfill material shall be properly placed and compacted to provide lateral restraint against deflection in the pipe diameter. Care shall be exercised to avoid contact between the pipe and compaction equipment.

Pipe interior surfaces shall be thoroughly cleaned of all foreign matter before being gently lowered into the trench and shall be kept clean during laying operations by means of plugs or other approved methods. Pipe 12-inches in diameter and smaller may be cleaned by flushing in place under the supervision of the Engineer if in the Engineer's opinion the pipe contains dirt that can be so removed; if not, then the pipe shall be cleaned by swabbing and flushing before it is placed in the trench. All pipe 12-inches in diameter and larger shall be thoroughly cleaned, by appropriate means, before placing it in the trench. During suspension of work for any reason at any time, including the end of each workday, a watertight plug shall be placed in the end of the pipe last laid to prevent mud or other foreign material from entering the pipe. Sufficient backfill material shall also be placed over the pipe to prevent flotation. Lines shall be laid straight and depth of cover shall be maintained uniformly with respect to finished grade, whether grading is completed or proposed at time of pipe installation. Pipelines shown on the plans to be laid at grade or with a specified slope shall be installed with the invert conforming to the required elevations, slopes and alignment shown and with the pipe bottom uniformly and continuously supported by a firm bedding and foundation. Pipe installed using horizontal directional drill will be installed within the tolerance outline herein.

The work shall at all time progress with caution so as to prevent damage to underground obstructions, both known and unknown. Should an obstruction not shown on the plans be encountered, the Engineer shall be immediately notified so that alteration to the plans can be made should realignment be necessary. The Contractor shall notify the Engineer far enough in advance to allow the realignment to be accomplished by deflection in the pipe joints or adjustment in the drilling operation.

Ductile iron pipe (and PVC pipe) shall be laid with bell ends facing in the direction of pipe-laying (upstream) unless directed otherwise by the Department. Only EPDM gaskets shall be used for PVC pipe and ductile iron pipe. Wherever it is necessary to deflect ductile iron pipe from a straight line, either in the vertical or

horizontal plane, the amount of deflection allowed shall not exceed 80% of that allowed under AWWA Standard C 600 (DIP) for the type of joint being installed and in accordance with the manufacturer's recommendations. Only after the pipe has been properly homed will it be allowed to be deflected. No deflection will be allowed in PVC pipe joints – however, longitudinal bending of PVC pressure pipe in conformance with AWWA C605 will be allowed.

Water mains crossing or parallel to storm sewer, sanitary sewer and gas mains shall have a minimum of 12 inches vertical clearance and a horizontal clearance which shall comply with all State, Local and Federal regulations and requirements. A minimum 3-foot pipe wall to pipe wall clearance shall be maintained between all utilities and water main. Any exceptions to these standards must be approved in advance by the Engineer. When crossing or parallel to storm sewer and sanitary sewer mains, including gravity sewers and force mains, with less than the minimum clearances, the Contractor shall protect the water main as shown on the plans or, in a manner acceptable to the Engineer. Where ductile iron or PVC pipe water mains are crossing sewer service laterals with less than the require 12 inch minimum clearance, the Contractor shall make the necessary adjustments to center a full joint of water main (18' min.) at the conflict point, or replace 10 feet of the lateral with PVC pipe meeting AWWA C-900 Class 150 centered over the conflict point. Sewer laterals, when replaced, shall be installed in accordance with the City of Tampa Department of Sanitary Sewers technical manual, latest edition.

#### 1. Thrust Restraint

All plugs, caps, hydrants, tees, valves, bends and other fittings on pressure pipelines require pipe joints be restrained up- and down-stream of the appurtenance. Mechanically restrained joints (via gasket-type restraints for new pipe push-on joints and MJ bell restraints for existing pipe) shall be provided as indicated on the plans, or as directed by the Engineer. Thrust blocks or reaction blocks are generally not acceptable, unless and only if approved in advance by the Engineer.

#### 2. Joints

The joints of all pipelines shall be made absolutely tight. The particular joint used shall be acceptable to the Department prior to installation. The gasket material for all joints shall be EPDM and shall be properly positioned before the pipe is lowered into the trench. The joining of the pipe shall proceed in accordance with the manufacturer's requirements. When restraint is required, push-on pipe joints shall be restrained as indicated on the plans, or as directed by the Engineer, with gripper-type restraint gaskets. Exterior metal restraint devices shall not be used to restrain non pipe-to-fitting joints.

##### a) Push-on Joints

In making up the push-on type joint, the EPDM gasket shall be placed in the socket with the large round end entering first so that the groove fits over the bend in the seat. A thin film of lubricant (approved by the manufacturer) shall then be applied to the inside surface of the gasket that will come in contact with the

entering pipe. The plain end of the pipe to be entered shall be thoroughly brushed with a wire brush and placed in alignment with the bell of the pipe to which it is to be joined. The joint shall be made up by exerting sufficient force on entering pipe so that its plain end is moved past the gasket until it seats as per manufacturer's recommendations. Backhoe buckets or excavation equipment shall not be applied directly to the pipe.

b) Mechanical Joints

Where shown on the plans, or where in the opinion of the Department, settlement or vibration is likely to occur, all pipe joints of pressure pipelines shall be bolted mechanical type as specified herein.

Mechanical joints shall be made up using high-strength, low-alloy steel bolts and rubber gaskets having either plain or duck tip as recommended by the manufacturer. All types of mechanical joint pipes shall be laid and jointed in full conformance with the manufacturer's recommendations. Only especially skilled workmen shall be permitted to make up mechanical joints.

Mechanical joints shall be centered in the bells. Soapy water shall be brushed over the gasket just prior to installation. The EPDM gasket and gland shall be placed in position, the bolts inserted, and the nuts tightened finger tight. Mechanical joints shall be assembled in accordance with AWWA Standards. The joints shall be tightened on opposite sides of the pipes by means of a torque wrench in such a manner that the gland shall be brought up evenly into the joint. The following range of bolt torques shall be applied:

<u>Bolt Size (Inches)</u>	<u>Range of Torque</u>
3/4" diameter	85 to 95 ft.-lbs.
1" diameter	95 to 100 ft.-lbs.

If effective sealing is not obtained at a maximum torque listed above, the joint shall be disassembled and reassembled after thorough cleaning. If the joint is defective, it shall be cut out and entirely replaced or if the Department gives permission, it may be repaired by a suitable clamp.

3. Plugs and Caps

Plugs shall be inserted into the bell ends of all open ductile iron pipe, tees or crosses. All plain ends of pipe and fittings shall be capped.

4. Completion

After the pipe (DIP or PVC) has been installed, inspected by the Engineer and found to be satisfactory, sufficient backfill shall be placed along the exposed areas of pipe to hold it securely in place while conducting the preliminary hydrostatic test. No backfill shall be placed over the ductile iron pipe joints until the preliminary test is satisfactorily completed, leaving them exposed to view for the detection of visible leaks.

Upon satisfactory completion of the preliminary hydrostatic test, backfilling shall be completed.

## **T2.06     Fittings**

Fittings shall be handled with care to avoid damage. All fittings shall be loaded and unloaded by lifting, and under no circumstances shall fittings be dropped, skidded, or rolled. Fittings shall not, under any circumstances, be placed against pipe or other fittings in such a manner that damage could result. Slings, hooks, or tongs used for lifting shall be padded in such a manner as to prevent damage or exterior surface or interior lining of fittings. If any part of the fittings' coating or lining is damaged by the Contractor, the repair or replacement shall be made by the Contractor in a manner satisfactory to the Engineer before installing. Fittings shall also be stored at all times in a safe manner to prevent damage and kept free of dirt, mud, or other foreign matter. All fitting gaskets shall be stored and placed in a cool location out of direct sunlight and out of contact with petroleum products. All gaskets shall be used on a first-in, first-out basis. Adequate precautions shall be taken to prevent the separation of joints at bends, tees, and plugged ends.

Details of design, construction, applications, installations, and number of joints necessary for the restraint of a given thrust shall be as specified herein, as shown on the Standard Details or as indicated on the plans. Under no circumstances shall gray iron pipe be used at restrained joints. Ductile iron pipe will be used unless otherwise specified by the Department.

Where reaction or thrust blocking is required, it shall be of concrete meeting the following design criteria:

- o     Compressive Strength - 3,000 PSI  
      90% after 7 days  
      110% after 28 days
- o     % Air Entrainment - 5.0%
- o     Water/Cement Ratio - 265 lb Water/CY Concrete
- o     Maximum Aggregate Size - 1½"
- o     Slump - 3" - 4"

Blocking shall be placed between undisturbed earth and the fitting to be anchored where firm support can be obtained. The area of bearing on the pipe and on the ground in each instance shall be that shown on the plans, the Standard Detail or as directed by the Engineer. The fittings shall be polyethylene encased in a manner acceptable to the Engineer prior to blocking. The blocking shall, unless otherwise shown or directed, be so placed that the pipe and fitting joints will be accessible for repair. If the soil does not provide firm support, then suitable tie rods, bridles, clamps and accessories as specified by the pipe manufacturer to brace the fitting properly shall be provided.

Pre-cast thrust blocks may be used in lieu of poured-in-place blocks on 8-inch and smaller ductile iron water mains only. This type of block must be manufactured in accordance with these Technical Specifications. Size and bearing area of blocks will be as shown in the standard details or as determined by the Department.

The Department has the authority to reject any damaged block or any block considered to be of questionable quality. Placement will be in accordance with standard procedures for restraining thrust. Earth behind such blocks will be either undisturbed or compacted to a minimum of 95% (Modified Proctor) density.

Tie rods and pipe clamps when allowed by the Department must be of adequate strength to prevent movement or other suitable means may be used as allowed by the Department. Steel rods, clamps, and washers shall be rustproof treated with bituminous material and polyethylene encased.

## **T2.07     Valves**

Valves shall be handled with care to avoid damage. All valves shall be loaded and unloaded by lifting, and under no circumstances shall valves be dropped, skidded, or rolled. Valves shall not be placed, under any circumstances, against pipe, other valves or other fittings in such a manner that damage could result. Slings, hooks, or tongs used for lifting shall be padded in such a manner as to prevent damage. If any part of the valves' coating and lining is damaged by the Contractor, the repair and replacement shall be made by the Contractor at his expense in manner satisfactory to the Engineer before installing. Valves shall also be stored at all times in a safe manner to prevent damage and kept free of dirt, mud, or other foreign matter. All valve gaskets shall be stored and placed in a cool location out of direct sunlight and out of contact with petroleum products. All gaskets shall be used on a first-in, first-out basis.

Valves shall be set and joined to new pipe in a manner heretofore specified for cleaning, laying, and joining pipe. Valves shall be installed such that the operating nut is plumb, and its top is no more than 48-inches from finish grade at the valve. Valves shall be furnished with extension stems if operating nut is greater than 48-inches deep, such that the top of nut is no more than 24-inches from of the top of the valve box (see Detail 3.05). Connection of the extension to the valve shall be with a wrench nut coupling and a set screw(s) to secure the coupling to the valve's operating nut. The coupling and square nut wrench shall be welded to the extension stem. Rock guard and centering plate are required. Extension stems shall be equal to or better than ProSelect Gate Valve Extension – with Centering Plate, or Trumbull Gate Valve Extension Stems, Style B.

Cast iron valve boxes shall be firmly supported and maintained centered and plumb over the operating nut of the valve by the Contractor with box cover flush with the surface of the finished pavement or at such other levels as may be directed. Valve boxes shall have 6-inch thick wire mesh reinforced concrete pads poured around the top section of the valve box when in pavement or when directed by the Department. The pad shall be 24 inches square and shall be centered on the valve box. All Department valve covers shall be painted safety blue as prescribed by the American Public Works Association (APWA) uniform color code for utility systems.

The valve and valve box shall be installed so Department personnel can insert a valve key through the valve box and completely open and close the valve. This test will be accomplished before final acceptance of the valve and box into the water system.



**T2.08     Taps, Valve Insertions and Linestops**

All material supplied shall be disinfected in accordance with Department standards.

After the tapping sleeve and valve have been installed and before the tap is made, the sleeve shall be tested to ensure a watertight joint. A test plug shall be provided in the sleeve and after the sleeve has been installed, it will be filled with water and the pressure increased to between 150 psi and 190 psi. All leaking joints shall be repaired to the satisfaction of the Engineer at the Contractor's expense.

All tapping sleeves shall be wrapped and sealed with polyethylene encasement material in a manner acceptable to the Engineer.

The contractor shall thoroughly clean the pipe surface, check the size and range of the sleeve to verify correct size of the product. Check the pipe surface to make sure it is free of flaws gouges and extreme irregularities. Pipe and face of gasket shall be lubricated with soap and water or gasket lubricating solution. Do not use grease or pipe lubricant.

Position half of body on pipe making sure the outlet is aligned with the branch line to be connected. Never position so that rotation is required. Position back-half of the body and install bolts. Tighten outside bolts first, working toward the center. Tighten bolts evenly alternating from one side of the sleeve to the other. Tighten bolts to the manufacturer required torque levels.

Check the inside of the sleeve and neck to make certain the gasket is properly sealed and not protruding where tapping cutter may damage it. Test assembly seals using test plug provided on sleeve. Once all seals are tight and test is complete, re-check bolt torques and proceed with tapping, valve insertion or linestop.

Install tapping valve per AWWA M-44. Provide for proper valve and pipe trenching, support, restraint and burial per the specifications herein.

**T2.09     Hydrants**

Fire hydrants (hydrants) shall be handled so as to avoid any damage at all times. Hydrants shall be located in a manner to provide complete accessibility and in such a manner that the possibility of damage from vehicles or injury to pedestrians will be minimized. Fire hydrants in FDOT rights-of-way shall conform to FDOT clear zone requirements. Unless otherwise directed, the setting of any hydrant shall be as described in these Technical Specifications, and as shown in Water Details 4.01 and 4.02.

Fire hydrants shall be thoroughly cleaned of dirt or foreign material before installation. All hydrants shall stand plumb and shall have their pumper nozzle perpendicular to the curb. The hydrant's bottom flange elevation shall be finished-grade plus 3- to 5-inches, and standard depth-of-bury shall be 3- to 5-feet. The Contractor will not be allowed to install hydrant extension kits (or vertical offsets of the hydrant lead) to

accomplish required bottom flange elevations..hydrant(s) provided shall be with the appropriate length of riser pipe(s) to achieve elevation(s) and depth-of-bury required for installation in accordance with Water Detail 4.01.

Each hydrant shall be connected to the water main with a 6-inch branch controlled by an independent 6-inch resilient seat gate valve hydrant shut-off valve. Per the Florida Fire Prevention Code, NFPA 1:18.3.4.1, clearances of seven and one-half feet in front of and to the sides of the fire hydrant are required, and four feet clearance required to the rear of the hydrant.

All fire hydrant leads shall be made of ductile iron pipe. All fire hydrant tees shall be made of ductile iron. All hydrants shall be anchored by restrained fittings as specified in these Technical Specifications and as shown in the Standard Details.

All fire hydrants shall be painted with a high-grade enamel, Federal Safety Yellow (OSHA approved), above the ground line.

All hydrant sets shall include the installation of a concrete thrust collar around the barrel of the hydrant 8 inches below the ground line.

Upon completion of installation and passing all required tests, the Contractor shall paint the bonnet of the hydrant OSHA green.

### **T2.10 Meter and Fire Service Connections**

Any water meter and fire service connection made to new water distribution mains shall be at locations called for in the plans, in meter set cards, or as otherwise directed by the Department. No meter or fire service connections are to be installed outside right-of-way limits unless easements have been provided or as directed by the Engineer. Any trenching, excavation, backfilling, cutting, tapping necessary to install meter and fire service connections and such incidental work associated with the installation of meter and fire service system shall be performed in strict accordance with these specifications or as directed by the Engineer. Meters and double detector check valves shall be handled so as to avoid any damage at all times.

Meter services to be transferred to new replacement water mains or meter service lines in conflict with other proposed construction (designated in the plans as circled meters) shall include new tap of the new water main for the service line, installation of appropriate sized HDPE tubing service line, and new HDPE meter box in accordance with Water Department Meter Details. Locations of existing meters shall remain unchanged, unless otherwise noted on the plans or as directed by the Engineer.

### **T3.00 TESTING**

The Department will require the Contractor to perform the required tests to ensure that all pipe installed

including service lines meets the Department's standards. The required tests are as follows:

**T3.01      Hydrostatic Testing**

1. Pressure Testing

All newly laid pipe, including fittings, valves and service lines shall be pressure tested in accordance with AWWA Standard C600 and these documents where applicable.

The Contractor shall provide all necessary equipment and instrumentation (pressure gauges, volume gauges, hoses pumps, test pipe, test fittings, etc.) required for flushing and testing of the piping systems. Pressure gauges shall be marked in graduated increments that do not exceed 2 pounds per square inch. Gauges used to measure the volume of water necessary to raise post-test line pressure back to the highest pressure achieved during the test duration will be marked in graduated increments which do not exceed 5 ounces. If requested by the Engineer, the Contractor shall furnish to the Engineer certified test data for the pressure gauges and recorders used on hydrostatic equipment. Water for test purposes will be supplied by the Department. At the option of the Engineer, flow meters and/or pressure gauges used on hydrostatic testing equipped with approved strip or round chart recorders shall be supplied by the Contractor. Tests shall be made in sections not to exceed 1/2 mile. Testing shall be conducted in the presence of and to the satisfaction of the Engineer as a condition precedent to the approval and acceptance of the system. Not less than 3 days of notice shall be given prior to start of such tests, and such testing shall not be scheduled until preliminary testing by the Contractor has indicated that the test section is ready for testing. The schedule and procedures for testing shall be determined by the Contractor and reviewed with the Engineer prior to testing.

The duration of each pressure test shall be at least 2 hours with a minimum test pressure in excess of 150 psi. At no time shall the test or line pressure exceed 190 psi. If required by the Engineer, pump test equipment will be equipped with pressure relief valves pre-set to 190 psi. Each valved section of pipe shall be slowly filled with water and a pump shall be connected to the low point of the section being tested.

Before conducting the test, the Contractor shall backfill all pipe and reaction blocking unless the Engineer directs certain joints or connections to be left uncovered. When reaction blocking is provided, the pressure test shall not be made until adequate curing time for the blocking has been allowed.

Before application of the test pressure, all air shall be expelled from the pipe. To accomplish this, taps will be made, if necessary, at points of highest elevation and afterward tightly stopped with tapered brass plugs, all at the Contractor's expense.

At the end of the 2-hour test period, the Contractor will be required to pump the lines back up to the highest pressure obtained during the duration of the test period.

Pressure tests shall be made between valves to demonstrate the ability of the valve to sustain pressure. All

pipng systems shall be tested in accordance with these test methods in addition to any other tests required by local plumbing codes or building authorities.

Throughout the duration of the test, the Contractor is required to maintain a minimum pressure in excess of 150 psi. The Contractor is advised that, should the test pressure fall to or below 150 psi any time during the 2-hour test, the test will be considered invalid and a retest will be required. Therefore, it is advised that the Contractor should pump water into the line as the test pressure approaches 150-psi.

The Contractor is warned that pressure testing against existing valves is done at his own risk. Failure of these valves to hold test pressure will not relieve the Contractor of performing a passing pressure testing.

All exposed pipe, fittings, valves and joints shall be carefully examined for leaks. Any cracked or defective pipe, fittings, valves or other appurtenances discovered as a consequence of the pressure test shall be removed and replaced with acceptable material. All leaking or defective joints shall be repaired, corrected or replaced. After all necessary replacements and corrections have been made the test shall be repeated to the satisfaction of the Engineer.

If the pipeline fails the pressure test twice, then the Contractor shall be required to retest the pipeline and provide to the Department certification by a Professional Engineer registered in the State of Florida, that the pipeline has passed the test in accordance with these standards prior to the Water Department scheduling and witnessing the pressure test.

## 2. Leakage Tests for Pipelines

Concurrently with pressure testing, pipelines shall be subjected to leakage tests.

Leakage measurements shall not be started until a constant test pressure has been established in excess of 150 psi.

The duration of each leakage test shall be at least 2 hours and the test pressure shall be as specified for the pressure tests. Leakage is defined as the quantity of water that must be supplied into the pipeline or section thereof to maintain the established test pressure after the air in the pipeline has been expelled and the pipe filled with water plus that volume of water required at the conclusion of the test to bring the line pressure back up to the highest pressure obtained during the duration of the test period.

The maximum allowable leakage shall not exceed the number of gallons per hour (gph) as determined by the following formula:

$$L = (SD \times \sqrt{P}) / 148,000$$

where:

- L - allowable leakage, gph
- S - length of pipeline tested, feet
- D - nominal diameter of the pipe, inches
- P - average test pressure during the leakage test, psi gage

When leakage exceeds the allowable limit, the defective pipe or joints shall be located and repaired. All visible leaks are to be repaired regardless of the amount of leakage. If the defective portions cannot be located, the Contractor shall remove and reconstruct as much of the work as is necessary until the leakage is within the allowable limits. Such corrective work or damages to other parts of the work as a result of such work shall be at the Contractor's expense.

Leakage detection at mechanical joints shall be stopped by tightening the gland (not to exceed required torque) and leaking slip joints shall be cut out and entirely replaced or if permission is given by the Engineer, it may be repaired by a suitable clamp. Any split, cracked or defective pipe, fittings, valves, or hydrants discovered as a result of this test shall be removed and replaced by the Contractor with sound material and then test shall be repeated.

If the pipeline fails the test twice, the Contractor shall be required to retest the pipeline and provide the Department certification by a Professional Engineer registered in the State of Florida that the pipeline has passed the test in accordance with these standards.

### **T3.02     Disinfection**

The Contractor shall disinfect the water mains in accordance with the applicable section of the latest AWWA Specification C651, as summarized below. The Contractor, if directed, shall use the method specified by the Engineer.

#### Method of Chlorination

##### 1. Slug Method

The slug method consists of: a) Completely filling the main in order to remove air pockets, b) flushing the main with a velocity of not less than 2.5 feet per second (fps) in order to remove particles, c) at a point not more than 10 feet downstream of the water source flushing the new main; chlorine is to be continuously injected for a sufficient period to develop a solid column or "slug" of chlorinated water, d) the slug of chlorinated water is to move through the main exposing all interior surfaces to a chlorine concentration of approximately 100 mg/L for at least a 3 hour period.

##### 2. Continuous Feed Method

The continuous feed method consists of a) completely filling the main to remove air pockets, b) flushing the

main with a velocity not less than 2.5 fps, c) at a point not more than 10 feet downstream of the water source flushing the new main; chlorine is to be injected in the new main at a constant rate sufficient to establish a 25 mg/L chlorine concentration throughout the main, d) Note table for amount of sufficient chlorine required for each 100 foot section of pipe of various diameters.

<u>Pipe Diameter</u>	<u>100% Chlorine (1b)</u>	<u>1% Chlorine Solution (gal)</u>
4	0.013	0.16
6	0.030	0.36
8	0.054	0.65

The chlorinated water shall be retained in the main for at least 24 hours and have a residual of not less than 10 mg/L free chlorine prior to flushing.

### 3. Testing

Upon completion of the hydrostatic test and disinfection, the Contractor shall notify and coordinate with the Department's Construction Management Section for bacteriological testing. Bacteriological testing shall be provided by a 3<sup>rd</sup> party laboratory retained by the Contractor. The Contractor shall install sample taps on the new main and at the end of each new branch of the piping system. The Contractor shall flush the chlorinated disinfection water from the piping system until a free chlorine residual of 1 to 1.5 mg/L is maintained. The Contractor will pull a water sample on 2 consecutive days allowing 24 hours for each sample to be processed. Meter transfers and connection of constructed water mains to existing water mains will not be allowed until sample clearance has been received from the Health Department.

Samples for bacterial analysis will be taken and analyzed by the Contractor's lab. The sampling process may only begin on Mondays or Wednesdays. Two consecutive approved samples, taken 24 hours apart, will be required. If the first sample is taken on Monday, the second sample must be taken on Tuesday. If the first sample is taken on Wednesday, the second sample will be taken on Thursday. No samples will be taken on Friday and the sampling process will not begin on Tuesday or Thursday. All drilling and tapping equipment shall be sterilized as directed by the Engineer.

After completing the testing and sterilizing and regardless of ground conditions, all sample taps and corporation stops shall be removed from the pipe and replaced with tapered brass plugs.

## **T4.00 RESTORATION**

### **T4.01 Waste Material Disposal**

The Contractor shall remove and dispose of all debris and excess spoil resulting from clearing, demolition

and excavation operations. Natural waterways or bodies water shall not be used for disposal or debris.

All debris shall be disposed of at a site approved and permitted by the State for such disposal. Clean spoil may be disposed on private property only with written authorization of the property owner.

Burning of brush or debris may be permitted, if allowed by the City, subject to the Contractor's securing permits and providing such fire watch and notification of local fire companies as may be required by local law or ordinance. Such permits, however, shall not relieve the Contractor of his responsibilities or liabilities with regard to protecting public health or properties.

#### **T4.02      Repair and Resurfacing**

Where street paving, driveways, sidewalks or curb and gutter is disturbed, restoration shall be made to a condition at least equal to the original. All materials used for restoration shall conform to standard requirements of that particular agency responsible for roadway maintenance where construction takes place. All restoration work shall also meet the requirements of both the permitting agency as well as the City. The Contractor shall determine, to his own satisfaction, any requirements and procedures, other than those set forth herein, which may affect the type, quality and method of carrying out the restoration to the satisfaction of the Department of areas to be restored.

Base material shall be of the type removed or of equal or greater structural strength as determined by the Engineer. Existing base material from the excavation shall not be reused as base material, but may be used as a stabilizer, or for trench backfill after removal of existing asphalt, unless it is determined by the Engineer to be unsuitable.

Edges of pavement shall be mechanically sawed to provide a neat, straight edge to the width shown on the plans, or greater if necessary, prior to replacement. Base material shall be placed to the depths required by permitting agency and thoroughly compacted to the density required by the Department or to the standard of the governing permitting agency.

The Contractor shall pay careful attention to the proper reconstruction of the pavement adjacent to the gutters and at street intersections to obtain satisfactory drainage to inlets from the intersecting streets.

#### **T4.03      Sodding**

All areas designated by the Engineer to be sodded shall be sodded according to installation procedures and materials outlined herein.

Sod shall be of the same type as the surrounding grassed areas (unless specified otherwise by the Department), be free of weeds, and have well matted roots. The sod shall be live, fresh, and uninjured at the time of placing. Materials for sodding shall meet the applicable requirements of Sections 575 and 981 of the

FDOT Standard Specifications, or the requirements of the governing permitting agency. Except as required to match surrounding grassed areas, sod may be St. Augustine, Bahia, or other varieties as selected by the Department.

Areas designated to be sodded shall first be fine graded to match surrounding areas and scarified or loosen to a suitable depth. Sod shall be placed as soon as possible after being dug and shall be shaded and kept moist from the time it is dug until it is planted. Methods for sodding shall meet the applicable requirements of Section 575 of the FDOT Standard Specifications, or the governing permitting agency.

**T4.04      PAVEMENT/RIGHT OF WAY RESTORATION REQUIREMENTS (rev. 2009)**

**Pavement Options:**

<b>PAVEMENT *(Classification)</b>	<b>BASE MATERIAL (Section 1-2)</b>	<b>CONCRETE (Section 1-3)</b>	<b>ASPHALT SURFACE (Section 1-4)</b>	<b>FULL DEPTH ASPHALT (Section 1-5)</b>
<b>A</b>	<b>6”</b>	<b>4”</b>	<b>1”</b>	<b>5”</b>
<b>I</b>	<b>8”</b>	<b>6”</b>	<b>2”</b>	<b>7”</b>
<b>II</b>	<b>12”</b>	<b>8”</b>	<b>3”</b>	<b>10”</b>

**\*Classification:**

Class A: Alleyways, Residential and Low Volume Commercial Driveways

Class I: 2-Lane Residential Streets and High Volume Commercial Driveways

Class II: Multi-Lane or High Volume 2-Lane Streets (most depicted by centerline markings)

Notes:

- 1) If existing roadway is stabilized, increase base material thickness by 50%
- 2) If original pavement exceeds max. 3” match the existing asphalt thickness
- 3) Minimum 4” of shell marl, crush concrete, or asphalt millings placed in unimproved (dirt) trafficked right-of-way
- 4) Concrete shock pad required for any utility repaired/ installed less than 30” (needs C.O.T. Engineer approval)
- 5) Brick pavement shall be restored as specified in Section 1-6 Brick Replacement

**SECTION 1 - PAVEMENT RESTORATION SPECIFICATIONS**

**1.0 BACKFILL and SUBGRADE:** Replace and compact clean sub-grade material classified as A-1, A-2, A-3. Backfill shall be free of objectionable material (bricks, broken pavement, concrete, clay, muck, etc.). If flowable fill is used both mix and installation shall conform to FDOT Standard Specifications for Road and Bridge Construction (January 2000), Section 121-1 through 121-6.



**1.1 Density Requirements:** Material shall be compacted in lifts not to exceed 12-inches. Densities are required at alternative 1ft. lifts of vertical fill above excavation bottom of trench and for each prepared trench segment, not to exceed 200 lf. Density test is not to be taken through succeeding layers. The final subgrade density test shall be taken at elevation beneath Base Material or Full depth asphalt.

**2.0 Density Specification:** Shall meet 98% compaction of AASHTO T-180.

**2.0 BASE MATERIAL:** Approved by a City of Tampa D.P.W. Engineer and/or meeting the FDOT Standard Specifications for Road and Bridge Construction (latest version). Submittal may requested by C.O.T.

**2.1 Acceptable Materials:** Limerock, Shell Marl, Crushed Concrete, Concrete (3000 min. PSI), and Asphalt Plant Mix.

**2.2 Density Requirements:** Place and compact in two lifts. Asphalt Plant Mix shall be compacted in accordance to Section 1-4. Densities are required for each trench segment at final grade, not to exceed 200'.

**2.3 Density Specifications:** Shall meet 98% compaction of AASHTO T-180.

**3.0 CONCRETE:** 3000 PSI minimum 28-day strength. Placed on compacted, moistened subgrade. Consolidate and cure. Do not load for 72 hours.

**3.1 Concrete Specifications:** Density test of subgrade may be required at the Inspector's discretion.

**4.0 ASPHALT SURFACE:** Sawcut all sides a minimum of 6-inches from replaced base. Paint with RC 70 (or equal) tack. Place and compact in lifts S-1 or S-3 type asphalt plant mix. The finished pavement is subject to inspection and approval by City of Tampa D.P.W. Engineer.

**4.1 Density Requirements:** Type S-1 lift to be 1¼" min. and 3" max. (if lift exceeds 2" compact with a drum roller type compactor). Type S-3 lift to be ¾" min. and 1½" max.

**4.2 Density Specifications:** Quality assurance testing of the asphalt may be required at the Inspector's discretion. (generally, 96% compaction of asphalt plant mix design bulk specific gravity)

**5.0 FULL DEPTH ASPHALT:** Same as requirements for Section 1-4 ASPHALT SURFACE

**6.0 BRICK REPLACEMENT:** Brick shall be re-laid according to Section 2 PROCEDURES. Place and grade 1½" of sand over base or concrete. Place brick uniformly, staggered with respect to the adjacent course. Any work area disturbing a street listed as a "Historical Street" shall be required to replace original brick. The contractor is responsible for safe storage of materials until such time the brick is re-laid.

**6.1 Base Options:**

- A. Limerock and Shell Marl: shall meet Section 2 BASE MATERIAL specifications, requires brick joints to be sealed with Asphaltic Steep #7330 or Surebond 1300 Sealer.
- B. Crush Concrete: shall meet Section 2 BASE MATERIAL specifications, requires brick joints to be sealed with 1:4 sand cement mixture (slurry or moistened to ensure that cement sets).
- C. Concrete: shall meet Section 3 CONCRETE specifications, 4” of concrete is used as base material, requires brick joints to be sealed with 1:4 sand cement mixture (slurry or moistened to ensure that cement sets).

**6.2 Density Requirements:** Subgrade material shall meet Section 1 BACKFILL and SUBGRADE. Base material shall meet Section 2 BASE MATERIAL.

**6.3 Density Specifications:** Shall meet 98% compaction of AASHTO T-180.

## **SECTION 2 - PAVEMENT RESTORATION PROCEDURES**

### **GENERAL:**

The Contractor shall contact the City’s Lab 24-hours in advance to coordinate specific testing services necessary to meet or satisfy the contract specifications, or as directed by the Department’s Engineer.

The Foreman on each project shall maintain on-site copies of the approved Department of Public Works “Application and Permit for Construction and Maintenance Operations within Public Rights of Way, including plans, drawings, and the Pavement Restoration Requirements – (2012 or latest issuance of Permit).

Copies of all applicable material delivery tickets and copies of all test results not taken by D.P.W. Materials Testing and Inspections, shall be forwarded to D.P.W. Technical Services at 3806 26 Ave East, Tampa, Fla. 33605. Fax number (813)-622-1956.

### **EXCAVATION:**

Utility installations shall be placed a minimum of 30” below grade. If, because of utility conflicts or unusual conditions, the 30” minimum depth requirement cannot be maintained, special authorization may be granted for installation at a lesser depth. Installations shall maintain the 30” depth, unless special authorization is granted in writing, by the D.P.W. Engineer.

All trench widths under pavement, including driveways, are to be a minimum of 18”, to allow mechanical compaction of backfill and base. Density tests are required and restoration shall meet SECTION 1.

Where pavement and/or base are undermined, disturbed, or otherwise damaged, such areas shall be cut away and the pavement replacement work extended to correct such conditions.

Tunneling under driveways, sidewalks, curbing, retaining walls, and pavement shall not be allowed unless

approved prior to work is given by C.O.T. Engineer.

When obstructions are encountered in driving or jacking, pipe shall be cut off, left in place, and filled with a flowable fill type grout to prevent the formation of voids.

Edges of jacking pits, directional bore pits, exit pits, trenches, etc. shall be a minimum distance, equal to the depth of the pit excavation, from any pavement, curbs, sidewalks, or other structures. If this distance cannot be maintained, backfill shall be compacted in lifts not to exceed 12" and density tests taken as outlined in SECTION 1.

Ditches shall be restored promptly to prevent the formation of sediment in the existing drainage system. Erosion control shall be enforced. The existing ditch grade and cross section profile shall be maintained. The City will require sodding, sprigging, or seeding and mulching to restore stable cover of vegetation on ditch banks, shoulders, and other areas disturbed by construction. Vegetation restoration will be kept moist and maintained until well established. Staking of sod will be required if ditch slope exceeds 4:1.

Erosion control shall abide by Erosion Control Methods set forth in C.O.T: D.P.W. Standard Drawings where applicable

Lawn and landscaped areas shall be restored to original or better condition. Each situation may require individual attention and differing restoration procedures.

**CONCRETE:**

Concrete sidewalks, driveways or pavement affected by construction operations will be corrected by removing and replacing full panels. Cuts in concrete sidewalks or driveways shall be sawed in straight lines at panel joints and replaced to full panels.

Concrete replacement shall be a minimum thickness of 6" for driveways and 4" for sidewalks. Concrete and density requirements shall meet SECTION 3.

Concrete curb and gutter will be formed and placed as a single unit to conform to City of Tampa Standards.

Expansion joints shall be provided at no more than 50' intervals on curb and sidewalk replacement work.

Expansion material shall be used where new concrete meets existing. Sidewalks shall have tooled construction joints or sawed control joints at 5' intervals for 5' wide sidewalk and 6' intervals for 6' wide sidewalk

**BRICK:**

Brick pavement shall be re-laid as called for by the street replacement schedule and on a complete and accepted base with a sand cushion and only clean whole, sound brick shall be used.

Brick replacement consists of bringing the area to be repaved to a subgrade and base conforming to the required grade and cross section of uniform density ready to receive the brick. Material and density shall meet requirements of SECTION 6.

Any part of the subgrade and base area inaccessible to the mechanical compactor shall be compacted by hand or power tamping in a manner acceptable to the engineer.

The brick shall be laid in straight courses, flat on the prepared sand cushion, with the better side of face upward.

The brick shall be laid in close contact and the joints of each course shall be uniformly staggered with respect to adjacent courses. Whole brick shall be used except in starting or finishing a course and in fitting around manhole tops or structures. In general, not less than ¼ of brick shall be used in batting.

The joints shall be filled in accordance with SECTION 6.1 C. The 1:4 sand/cement mixture shall be “soupy” and swept in with street brooms or may be dry mixed, swept in with street brooms, consolidated by vibratory methods, and sufficiently moistened to ensure that cement sets. Excess grout shall be removed from surface.

Joint filler shall take place immediately to prevent joints from filling with foreign matter.

**ASPHALT:**

Asphalt pavement edges of cuts are to be sawed in straight lines parallel and perpendicular to pavement edges. One uniform parallel line for paving shall exist along edge outside trenchline. When the existing asphalt is less than 3” thick, pavement shall be cut and removed for a minimum distance of 6” from edge of the trench.

Tack coat shall be applied to the surface of the pavement base and adjoining asphalt butted edge joint. *No* “feathering” of asphalt at the joint will be allowed. These areas are to be free of all loose material and foreign matter before applying tack coat.

Asphalt pavement installation shall be rolled in place in a controlled pattern with a mechanical compactor capable of sufficiently applying enough loads to meet density requirements in accordance with SECTION 4.

If an asphalt overlay is called for, a string line must be used while spreading the material, to obtain neat patches with straight edges. Where a cut is adjacent to or within 3’ of a previous patch, the pavement replacement and/or resurfacing shall be extended to include the previous patch.

Final surface restoration must be completed to the City’s standards and the City reserves the right to require the entire roadway surface width to be overlaid to lengths determined by the City.

Upon completion of the roadway surface, the contractor shall replace all damaged pavement markings per City standards.

**TEMPORARY RESTORATION:**

Temporary pavement surfaces and sub surface materials shall be restored conforming to all requirements regarding configuration, thickness, and density as detailed in SECTION 1. The pavement shall be temporary finished with a suitable grade of asphalt and sand to provide a temporary-wearing course and to eliminate a dust nuisance. Temporary pavement shall be restored with the proper **permanent** surface within specified time period stated in the legal Permit for Construction and Maintenance Operations within Public Rights of Way.

**SECTION 3 - VITRIFIED BRICK REPLACEMENT (rev. 4/27/2009)**

**Subgrade:**

This work consists of bringing the area to be repaved to a subgrade conforming to the required grade and cross section surface of uniform density ready to receive the base course. This is to be accomplished by excavating or backfilling as needed, shaping, and then rolling the entire area with an approved self-propelled tandem roller weighing not less than 8 tons. Shaping and rolling to continue until subgrade has been properly prepared and shows that no further compaction of any practical benefit would result from continued rolling. It shall be tested as to cross section, crown and elevation. After being properly prepared, it shall be so maintained until the base course is constructed. A completed subgrade shall be maintained sufficiently in advance of the base course operations to permit of proper control. Any part of the subgrade area inaccessible to the roller shall be thoroughly compacted by hand or power tamping in a manner acceptable to the engineer. Subgrade shall be minimum 12" and be compacted to 98% per AASHTO T-180.

**Base:**

This work consists of placing 10" of crushed concrete base material atop the prepared and accepted subgrade. The base will be placed in at least two lifts. The 10" crushed concrete will have a minimum LBR of 100 and will be compacted to 98% per AASHTO T1-80.

Where a base is encountered under the brick pavement, it shall be restored to the same thickness with the approved crushed concrete material before relaying the brick pavement.

**Sand Cushion:**

A sand cushion shall be constructed on all completed bases for vitrified brick pavement. The sand cushion shall be sharp sand clean sand, free from clay, loam and other foreign matter, and shall be constructed to a uniform thickness of 1-inch upon the completed crushed concrete base. The sand cushion shall be prepared at least 25 feet in advance of laying the brick where possible. Care shall be exercised that the sand cushion is not disturbed or compacted until the bricks are in place and are ready for rolling.

**Vitrified Brick Pavement:**

Vitrified brick pavement shall be re-laid at locations called for by replacement schedule for street paving disturbed by construction operations, as shown on the plans. Vitrified brick pavement shall be re-laid on a completed base with a sand cushion and only clean whole, sound bricks shall be used. Acceptable brick removed from the disturbed areas removed by the contractor and/or removed from the City of Tampa stock pile, will be used for this repaving and shall not be hauled or moved by the contractor for use elsewhere unless directed by the engineer.

The brick shall be laid on straight courses, flat on the prepared sand cushion, with the better side of the face upward. The brick shall be laid in close contact and the joints of each course shall be uniformly staggered with respect to adjacent courses. Whole brick shall be used except in starting or finishing a course and in fitting brick pavement around manhole tops or other structures. In general, not less than one-fourth of brick shall be used in batting.

A timber straight edge shall be driven against each fourth course of brick by light blows with a sledge or maul to straighten the lines and eliminate appreciable space between the bricks.

The surfaces shall be swept clean and rolled with a tandem static roller weighing not less than 5 and no more than 8 tons in a manner to firmly embed each brick in the sand cushion so that the completed pavement shall conform to the required crown, grade, and cross section.

The joints of the vitrified brick pavement replacement shall then be filled with a 1:4 sand/cement mixture and/or pure sand. If pure sand, the pure sand must be sealed with Surebond SB-1300 Sealer or approved equal. The 1:4 sand/cement mixture of mortar grout shall be “soupy” and swept in with street brooms **or may be dry mixed, swept in with street brooms, consolidated by vibratory methods, and sufficiently moistened to ensure that cement sets.** If “soupy” application is used, then Contractor will blot the joints with sand after sweeping application to remove excess grout.

The application joint filler should take place immediately after laying the brick or as soon as possible thereafter to prevent joint from filling with other foreign matter.

**T5.00      RECORD DRAWINGS**

After completion of the water main construction and testing the Contractor shall submit the following to the Construction Engineer:

1. Two (2) sets of the approved construction plans marked-up to indicate the installations as constructed (as built), signed and sealed by the Engineer of Record.
2. One (1) disk or CD containing the AUTOCAD files (version 2017 or earlier) of the

as-built construction plans for the constructed City water facilities, in .DWG format, or approved equal

Record drawings shall show changes to and/or deviations from the Department-approved construction plans. Changed information shall be crossed out while remaining legible with the new information printed by the original. Significant changes such as pipeline routing or alignment should be highlighted on the drawings using a “cloud”. Items that must be shown on the record drawings include:

1. Locate pipe (horizontal and vertical alignment/depth of cover or top of pipe elevation) within the right-of-way at regular intervals, particularly noting where pipe alignment (horizontal or vertical) varies from design. Designate type of pipe (size and material). Sketch details as required.
2. Locate all alignment changes, both horizontal and vertical, by station and offset, elevation and depth of cover from finished grade.
3. Locate all valves, by station and offset, elevation and depth of cover from finished grade and show type of valve.
4. Locate all fittings (bends, reducers, sleeves, plugs, caps, offsets, tees, crosses, etc.) by station and offset, elevation and depth of cover from finished grade. Designate type of fittings. Include sketch details as required to illustrate the as-built installation.
5. Locate any casing pipes by station and offset, elevation and depth of cover from finished grade at both ends. Note casing size.
6. Provide changes to finished grade.
7. Report any changes in alignment or elevation of other utilities. Report all utilities not shown on plans.
8. Where available, locate pipe or water appurtenances in relation to other physical features.
9. Provide valve-to-hydrant distance, and hydrant main valve diameter.
10. Verify by indicating on as-built drawing (by circling or check marking) whether or not design dimensions are correct and if installations have been completed.
11. Field changes of the design should be adequately detailed. Stations and offsets shall

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be noted. Include sketch details as required.



## **WATER MATERIALS SPECIFICATIONS**

### **GENERAL REQUIREMENTS**

All materials shall be in accordance with these Material Specifications and shall, in no event, be less than that necessary to conform to the requirements of any applicable law, ordinances and codes. All materials or products that will be in contact with potable water shall be listed by the National Science Foundation (NSF-61 listed) or by an approved certifying agency as conforming to the requirements of ANSI/NSF-61.

Items designated to be “domestically manufactured” shall be manufactured, assembled and tested in their entirety within the United States of America or its territories. Items designated to be “domestically assembled” may be foreign-manufactured but shall be assembled and tested in their entirety within the United States of America or its territories. Items requiring a “domestic presence” may be foreign-manufactured and/or assembled and/or tested, but the manufacturer shall have a designated representative or agent located within the United States of America, and that representative or agent shall be available to provide on-site service if required by the City of Tampa Water Department (Department).

All materials shall be new, unused, and correctly designed. They shall be of standard first grade quality, produced by expert workmen, and intended for the use for which they are offered. Materials or equipment which, in the opinion of the Department, are inferior or are lower grade than indicated, specified or required, shall not be accepted. All materials used in this contract must be approved in advance by the Engineer. In conformance with section G-4.02 of these contract documents, any two items of the same kind, type or classification, and being used for identical types of service, shall be made by the same manufacturer. Unless approved in advance by the engineer, only one manufacturer may be used for each item under this contract.

### **POLYETHYLENE ENCASEMENT**

#### **1. GENERAL**

Polyethylene encasement shall conform to the requirements of ANSI/AWWA C-105/A21.5 Method A and shall be 8-mil thick. Polyethylene encasement shall be installed on all buried ductile iron pipe, fittings, valves, and appurtenances where shown on the drawings or as directed by the Water Department as dictated by field conditions. It shall be blue in color.

#### **2. PRODUCT**

The raw material used to manufacture polyethylene encasement shall be Type 1, Class A Grade E-1 in accordance with ASTM D-1248

The polyethylene encasement shall meet the following test requirements:

Tensile Strength	1200 psi minimum
Elongation	300% minimum
Dielectric Strength	800 V/Mil thickness, minimum
Thickness	0.008" (8-mils (minimum nominal, with minus tolerance < 10% of nominal)
Melt Index	0.4 maximum

### 3. **QUALITY CONTROL AND TESTING**

When submitting for approval polyethylene not listed in Section 4, manufacturer shall include drawings and brochures that clearly indicate size, dimensions, weights, performance standards, etc. If this documentation is omitted, the polyethylene may be rejected at the sole option of the City.

### 4. **MANUFACTURER**

All polyethylene encasement shall be domestically manufactured.

## **TRANSITION COUPLING**

### 1. **GENERAL**

Transition coupling shall be used to connect two plain end pipes of equal or slightly different outside diameters. Transition coupling shall also be used to connect different types of pipe. The transition coupling shall operate by placing two plain ends of pipe inside a rigid sleeve, and drawing in two compression glands upon two un-cut full circle gaskets to produce a seal between the ends of the rigid sleeve and the adjacent outside wall of the existing pipe.

### 2. **PRODUCT**

- a. Transition coupling shall be composed of three parts: rigid sleeve, compression glands, and gaskets.
- b. The rigid sleeve shall be manufactured of ferrous material that is protected against corrosion by epoxy coating or approved method during the working life of the fitting. The rigid sleeve shall be the "long-body" type.
- c. The compression gland shall be manufactured of ferrous material that is protected against corrosion during the working life of the fitting by epoxy coating or approved method. The glands shall be drawn in mechanically by bolts and nuts made of high-strength, low-alloy steel such as "Corten", "Usalloy", or "ACIPalloy".
- d. The gasket shall be EPDM. The gasket shall be resistant to permanent set during the working life of the fitting.

- e. Transition coupling for nominal size pipe of 2-inch shall be capable of connecting McWane enamel cast iron pipe to 2-inch PVC, SDR 21, pipe. Working pressure ratings shall be:

Type of Pipe	Size (in.)	Rated Pressure	O.D.
McWane Cast Iron	2	200	2.50
McWane Cast Iron	2.25	200	2.75
PVC (SDR 21)	2	200	2.38

The transition coupling shall be manufactured to meet these stated diameters.

- f. Transition coupling for nominal size pipe, 3-inch and greater, shall be capable of joining standard ductile iron pipe to pit cast iron pipe Class C-D, Asbestos-Cement pipe, PVC sch 40, PVC sch 80, or PVC pressure rated pipe. Transition coupling shall join different diameter pipes by the following means:
- 1) by a coupling designed for stated diameters,
  - 2) by a coupling designed with a variable range using a compressible gasket,
  - 3) by a coupling with a variable range using different gaskets,
  - 4) or a coupling using any combination of described designs.

**3. QUALITY CONTROL AND TESTING**

When submitting for approval transition coupling not listed in Section 4, manufacturer include drawings and brochures that clearly indicate size, dimensions, weights, performance standards, etc. If this documentation is omitted, the transition coupling may be rejected at the sole option of the City.

**4. MANUFACTURER**

Transition coupling for nominal size pipe 2 to 3 inches shall be Baker 200, Ford FCI/2/3, Dresser 38/138/40, JCM 212, Rockwell 411/413/431/441/433, ROMAC 602 Viking Johnson, or approved equal.

Transition coupling for nominal size pipe 3-inches and greater shall be Baker 200/204/213, Ford FCI/2/3, Dresser 38/138/40/162, Rockwell 411/413/431/433/441, JCM 212, Mueller H1020, ROMAC 501/602 Viking Johnson, or approved equal.

## **BRASS FITTINGS**

### **1. GENERAL**

All brass fittings for service lines shall be included under this specification. Brass fittings include any and all required accessories.

### **2. PRODUCT**

- a. All fittings shall be manufactured of brass, cast and machined in accordance with AWWA Standard C-800, latest revision.
- b. All fittings shall perform in accordance with AWWA C-800, latest revision.
- c. All fittings shall be certified as suitable for contact with drinking water in accordance with ANSI/NSF Standard 61, Drinking Water Components – Health Effects, Section 8. Certification shall be by an accredited certification organization or by a laboratory able to demonstrate that the NSF 61 lead testing protocol was followed.
- d. All brass fittings shall comply with Florida Administrative Code (F.A.C.) 62-555 (latest revision), the Safe Water Drinking Act, as amended, and the U.S Environmental Protection Agency (E.P.A.).
- e. All brass fittings shall be made of a “No-Lead Brass”, defined for this specification as brass alloy containing not more than one fourth of one percent (0.25% or less) total lead when used with respect to the wetted surfaces of the fitting, as defined by NSF/ANSI 61, Annex G and Annex F.
- f. All brass fittings shall be integrally stamped or cast with the manufacturer's name and a marking or trademark identifying that the fitting contains a “no lead” brass alloy (as defined herein), e.g., ‘NL’, ‘EB2’, or ‘FED’, etc.
- g. Manufacturer shall provide a copy of a letter from NSF International (on NSF letterhead) documenting compliance with NSF/ANSI 61 Annex F.
- h. All curb stops/meter valves shall be full-port and have a flow passage area equivalent to the fitting outlet flow area.
- i. Curb stops shall be of the ball valve design with a full-port opening ball no less than ¾-inch. 1-inch and larger curb stops shall be provided with padlock wings cast on stop body and operating tee cap to provide for locking the stop in closed position. ¾-inch curb stops shall be provided without padlock wings. Curb stops for use with copper or plastic service shall have an inlet connection with a pack joint compression nut (w/set screw) and an outlet connection with female iron pipe thread (FIP), as manufactured by:

Ford Meter Box Company (FMBC) [B41 for 3/4-inch; B41W for ≥1-inch];  
Mueller [P-25170N]; A.Y. McDonald [6102 for 3/4-inch; 6102W-22 for ≥1-inch], or  
approved equal.

Curb stops with Inside Iron Pipe Thread (FIP) inlet connections and an Inside Iron Pipe Thread outlet connections shall be:

FBMC [B11 for 3/4-inch; B11W for ≥1-inch]; Mueller [B-20200];  
A.Y. McDonald [6101W], or approved equal.

- j. Meter valves shall be of the ball valve design with a full-port opening ball no less than 3/4-inch. Meter valves shall be provided with padlock wings cast on stop body and operating tee cap to provide for locking the stop in closed position. Meter valves for use with copper or plastic service shall have an inlet connection with a compression joint and a swivel nut outlet connection.

Angle meter valve:

FBMC BA43W, Mueller P-24258N, A.Y. McDonald 4602B-22, or approved equal;

Straight meter valve:

FBMC B43W, Mueller P-24350N, A.Y. McDonald 6100MW-22, or approved equal.

Straight meter valves with Inside Iron Pipe Thread inlet (FIP) and a Meter Swivel Nut outlet connection shall be: FMBC B13W; Mueller B-24351N; A.Y. McDonald 6101MW, or approved equal.

- k. Corporation stops shall be of the ball valve design. Corporation stop inlet connection shall be the AWWA Taper thread. The outlet connection shall be CTS pack-joint for copper or plastic tubing. Corporation stops for sizes 3/4" – 2" shall be: FMBC FB-1000, A.Y. McDonald 4701B-22, Mueller P-25008N, or approved equal.
- l. Meter re-setters shall be designed for use with standard 5/8"x3/4" and 1" water meters. Resetters shall be constructed from brass fittings conforming to the specifications herein, with copper riser pipes. An angle ball valve shall be provided on the inlet riser, saddle nuts and gaskets on inlet and outlet. Pipe connections shall be (nominal) male iron pipe size meter thread on both inlet and outlet. Meter re-setters shall be FMBC VB40 Series, Mueller B-24118R, A.Y. McDonald Series 18, or approved equal.
- m. Branch connections shall be brass construction with copper compression joint inlet and male iron pipe size outlets, as manufactured by FMBC U48, Mueller P-15363N, A.Y. McDonald 08U2M, or approved equal.

**3. MANUFACTURER**

Brass fittings shall be domestically manufactured by Mueller Company, Ford Meter Box Company, A.Y. McDonald Mfg. Company, or approved equal.

**THREADED BRASS FITTINGS**

**1. GENERAL**

Threaded brass fittings provided under this specification shall be manufactured in accordance with specifications stated herein.

**2. PRODUCT**

- a. Threaded brass fittings ("Fittings") provided shall be manufactured in accordance with ANSI B16.15., 125 lb.
- b. Fittings shall be of material conforming to ASTM B62 or B584.
- c. Threads on all fittings shall be N.P.T. in conformance with ANSI B1.20.3, right hand and shall be smooth, clean and true to form.
- d. Fittings shall be legibly cast or dye stamped such that the manufacturer's name, initial or other mark can be easily identified.
- e. All fittings shall be certified as suitable for contact with drinking water in accordance with ANSI/NSF Standard 61, Drinking Water Components – Health Effects, Section 8. Certification shall be by an accredited certification organization or by a laboratory able to demonstrate that the NSF 61 lead testing protocol was followed.
- f. All brass fittings shall comply with Florida Administrative Code (F.A.C.) 62-555 (latest revision), the Safe Water Drinking Act, as amended, and the U.S Environmental Protection Agency (E.P.A.).
- g. All brass fittings shall be made of a "No-Lead Brass", defined for this specification as brass alloy containing not more than one fourth of one percent (0.25% or less) total lead when used with respect to the wetted surfaces of the fitting, as defined by NSF/ANSI 61, Annex G and Annex F.
- h. All brass fittings shall be integrally stamped or cast with the manufacturer's name and a marking or trademark identifying that the fitting contains a "no lead" brass alloy (as defined herein), e.g., 'NL', 'EB2', or 'FED', etc.
- i. Manufacturer shall provide a copy of a letter from NSF International (on NSF letterhead) documenting compliance with NSF/ANSI 61 Annex F.

3. **QUALITY CONTROL AND TESTING**

Certification of the aforementioned standards must be available and provided, if requested by the City of Tampa. If requested, an Affidavit of Compliance to these standards and specifications shall be signed and submitted by an officer of the manufacturing firm.

4. **MANUFACTURER**

None specified.

**SERVICE SADDLES**

1. **GENERAL**

Service saddles shall be used for tapping water distribution pipes to provide a drip-tight connection to the main for customers' water meters. Service saddles shall incorporate a wrap-around type body, straps, gasket and bolts. When installed, the body shall wrap around the main for a minimum of 160 degrees.

2. **PRODUCTS**

- a. Service saddle for pipe less than 3-inches shall be single band which is hinged or split from the saddle body and is anchored by bolting one or more bolts between the band and saddle body, or a double strap design anchored by four bolts.
- b. Service saddles for pipe equal to or greater than 3-inches shall use a double-wide single flexible band or a double strap with a minimum of a four bolt pattern anchoring. These service saddles shall provide for a variable range in diameter per nominal size of pipe, yet shall fit the stated diameter for the nominal size pipe noted.
- c. Service saddles shall be constructed from bronze, ductile iron in accordance with ASTM A536, or stainless steel and shall seal to the distribution pipe by an EPDM rubber gasket. The gasket shall maintain a resilient seal without cracking or becoming brittle during the working life of the service saddle. All service saddles shall have corporation tap threads.
- d. Threads shall be AWWA CC in accordance with AWWA C-800.
- e. Gasket shall be of self-sealing design.
- f. Service saddle bodies shall be protected with a heavy coating of corrosion resistant, metal primer.
- g. Service saddles provided shall be suitable for use with water of 100 degrees Fahrenheit and

pressure up to 150 psi without rupture and failure.

- h. Straps and bolts shall be carbon steel conforming to ASTM A108, electro-galvanized with dichromate seal.

**3. QUALITY CONTROL AND TESTING**

When submitting for approval of a service saddle not listed in Section 4, include manufacturer drawings and brochures that clearly indicate size, dimensions, weights, performance standards, etc. If this documentation is omitted, the service saddle may be rejected at the sole option of the City.

**4. MANUFACTURER**

Service saddles for 2-inch or less pipe and 3-inch or greater pipe shall be as follows:

2-inch or less:

Clow 3401	Ford 570/590	JCM 401/402/403/405 (DI)
Jones J-995	Rockwell 313/317	Ford FS-/ FC-202; F101/202
Smith Blair 311		Mueller H-13420/10475-76

3-inch or greater:

Cascade C-S22/CDS2/CNS2/CSC2	Mueller H-105XX series
Rockwell 313 (DI) /317/323	Clow 3408/3410
JCM 402 cortin strap (for DIP)	Smith Blair 311
Ford FS- or FC-202 series	JCM 406 (for PVC)

or approved equal.

**WATER METER BOXES & COVERS**

**1. GENERAL**

Water meter boxes (“Meter Boxes”) and covers (“Covers) shall be manufactured in accordance with these specifications.

Covers provided shall be designed to withstand incidental loading or heavy traffic (“extra-heavy”) loading as specified herein.

Meter boxes and covers provided shall be in accordance with City of Tampa Water Department “Standard Details” for meter boxes (see Details 5.10A, 5.11A, 5.12A & 5.13).

Meter boxes and covers provided for potable water service shall be black in color and meet loading requirements as specified herein.



Meter boxes and covers provided for reclaimed water (RCW) service shall be colored Pantone purple. Covers for RCW meter boxes shall include “NO BEBER”, and the universal symbol for DO NOT DRINK (the glass with a line (or “x”) through it).

## 2. PRODUCT

### 2.1 Meter Boxes

Meter boxes shall be LLD- or HD-polyethylene of one-piece molded construction, with dimensions as shown in the referenced drawings. The boxes shall be designed to meet the requirements for AASHTO Incidental Traffic H-10 loading.

All edges shall be clean and smooth for safety during handling. Exterior wall shall be of smooth finish, black in color, and have ultraviolet degradation protection properties for above ground storage (except reclaimed water meter boxes shall be purple). Interior wall shall be of smooth finish and black or white color (except reclaimed water meter boxes shall be purple).

Meter boxes shall not exceed 25 lbs. in weight, shall have pre-cut pipe entry areas, and be designed to be securely stackable.

Meter boxes shall be dimensioned to accommodate meter box covers as specified below.

### 2.2 Meter Box Covers shall:

- i. be made of modified polyethylene or bulk molded compound composite material to prevent floating in high water conditions;
- ii. be one-piece molded construction, with dimensions and lettering as shown in the referenced meter box Std. Detail drawings;
- iii. be designed to meet the requirements for AASHTO Incidental Traffic H-10 loading;
- iv. be “anti-float”, demonstrated by having a specific gravity  $>1.0 \text{ gm/cm}^3$  (ASTM D792).
- v. include snap-lock pockets (slide mounts) on the underside to receive an AMR/AMI device endpoint. Snap-lock slot shall be of size sufficient to allow for a finger force install of an AMI transmitter, and pocket height shall be sufficient to allow a minimum 1/8” air gap.
- vi. include minimum #3 rebar or other tested and proven means of enabling magnetic location of the cover when it is buried.

vii. be sized to fit the appropriate Brooks Products, Inc., Orlando, Florida concrete meter boxes, numbers 36, 37, 66 and Dual H:

Description	¾" Dual	¾" or 1" Single	1½"-2" Single	Dual w/BFP
<b>Meter Box Type</b>	<b>Dual H</b>	<b>#37</b>	<b>#66</b>	<b>13 x 24</b>
<b>Meter Box</b>	16-9/16" x 14-	18-1/8" x 11-	30-1/2" x 17-1/2"	13 ¾" x 23 ¼"

Composite covers shall have a minimum coefficient of friction of >0.5 (ASTM 1028), to prevent pedestrian slip hazard. Polyethylene covers shall have a molded tread-pattern for skid resistance.

“Extra-heavy” covers provided shall be designed to meet the requirements for AASHTO Full Traffic H-20 loading.

**3. MANUFACTURER**

Water meter boxes and meter box covers provided shall be equal to or better than:

Meter Boxes:

DFW Plastics, models:  
DFW37C-12-BODY; DFW39C-12-BODY;  
DFW1730CH-12-BODY; DFW 1324C-12-BODY

Oldcastle Enclosure Solutions, models:  
1015-12 BCFXL (#36); 1118-12 BCFXL (#37); 1416-12 BCFXL (Dual);  
1730-12 BCFXL (#66); 1324-12 BCFXL (Dual Meter & w/BFPs).

Meter Box Covers:

DFW Plastics, models:  
DFW37C-AF1EA TPA-LID; DFW39C-AF1EATPA-LID;  
DFW1730C-AF1EA TPA LID; DFW1324C-AF1EA TPA-LID

Oldcastle Enclosure Solutions “Fibrelyte”, models:  
FL9X (36), FL12 (37), FL1416 (Dual), FL36 (66), FL30 (Dual BFP)

**RESTRAINT DEVICES**  
**(for Push-on-, Mechanical-, and Flanged Joint Pipe and Fittings)**

**1. GENERAL**

Mechanical restraint devices shall be used to restrain plain ends of ductile iron, PVC or HDPE pipe to

push-on, mechanical, or flange joints, or fittings which meet ANSI/AWWA C-110/A21.10 and ANSI/AWWA C-111/A21.11, latest revisions.

Wedge action restraint for mechanical and flange joint pipe and fittings shall be incorporated in the design of the follower gland and shall include a restraining mechanism (the lug) which, when activated, imparts multiple wedging actions against the pipe, thereby increasing its restraint on the pipe as the joint tries to separate. "Twist-off nuts" shall be used to ensure proper actuating of the restraining device.

Restraint devices used with PVC pipe shall be those designed for (and recommended by the pipe manufacturer) for use on PVC pipe. PVC restraining devices shall meet or exceed all requirements of ASTM F1674 "Standard Test Method for Joint Restraint Products for Use with PVC Pipe".

When mechanical restraint devices are used for connecting plain ends of HDPE pipe to mechanical joint fittings and valves, manufacturer recommended stainless steel inserts are required.

## **2. PRODUCT**

### **a. Push-on Joint Restraint**

Restraint of push-on joint ductile iron pipe may be with "locking" or "gripper" gaskets, consisting of an EPDM rubber gasket with high-strength stainless steel locking elements vulcanized into the gasket, which when activated develop wedging action between the pairs of stainless steel elements spaced around the gasket and the pipe.

### **b. Flange Joint Restraint**

Flange joint restraint fittings shall include individually activated gripping wedges and gaskets. Flange joint restraint fittings shall attach to the plain end of a pipe by wedge screws to produce a flange which joins to an existing integral companion flange. Flange joint restraint fittings shall be constructed of ductile iron meeting ASTM A536 and manufactured in accordance with ANSI/AWWA C-110/A21.10 (or C-153/A21.53) and C-111/A21.11, latest revision. All flanges shall have bolt circle and bolt holes which match a Class 125 flange and are compatible with ANSI/AWWA C-115/A21.15. Gasket shall be made of EPDM rubber.

### **c. Mechanical Joint Restraint**

The wedge action follower glands shall be manufactured of ductile iron conforming to ASTM A536-80. The wedging lug and bolt shall be manufactured of ductile iron which has been heat-treated to a minimum hardness of 370 BHN.

Wedge action glands shall be dimensioned such that they can be used with standard mechanical joints and have tee-head bolts conforming to ANSI/AWWA C-111/A21.11 and ANSI/AWWA C-153/A21.53, latest revision.

d. Existing Pipe Joint Restraint

(1) Split-restraint fittings for mechanical joints on existing pipe installations shall be manufactured in accordance with these technical specifications; however, split-restraint fittings shall be segmented to allow restraint of existing ductile iron mechanical joints meeting AWWA C111.

(2) Split-restraint fittings for existing pipe bell-and-spigot joints shall consist of split restraint rings, one installed on the pipe barrel behind the bell. Restraint devices shall be ductile iron per ASTM A536, latest revision, min. Grade 60-42-12. Threaded rods shall be high strength low-alloy steel per AWWA C111, latest revision.

e. Coatings

(1) Flange Adapters shall be provided with painted "shop coat", or approved equal.

(2) Retainer glands shall be provided with a bituminous coat.

(3) Existing pipe push-on joint restraint fittings shall be provided with a bituminous coat.

**3. QUALITY CONTROL AND TESTING**

a. Pipe restrained with mechanical restraint devices specified shall be capable of withstanding the following pressures:

Push-on and Mechanical Joint -	4" - 16"	min. 350 psi
	>16"	min. 250 psi
Flanged Joint -	4" - 36"	min. 250 psi

**4. MANUFACTURER**

a. Ductile iron pipe push-on joint restraint devices shall be U.S. Pipe "Field-Lok" Gasket, American "Fast-Grip" Gasket, or approved equal.

b. Ductile iron pipe flange joint restraint devices shall be approved, equal to, or better than EBAA Iron "Megaflange Series 2100" or "1000 EZ Flange", or Ford Meter Box Company "Uni-flange Series 400-C".

c. Wedge action restraint for ductile iron pipe mechanical joints shall be equal to or better than EBAA Iron "Megalug, Series 1100", Tyler/Union TUF Grip TLD, Sigma One-Lok Model SLD (4" to 36") or approved equal.

- d. Split, wedge-action restraints devices for restraint of existing ductile iron pipe and fitting joints shall be EBAA Iron “Megalug, Series 1100-SD, or -HD”, or approved equal.
- e. Restraint of PVC pipe bell-and-spigot joints shall be made with Uniflange 1350C; Uniflange 1390C; Megalug 1600; Sigma PV-Lok Series PVP; or approved equal.
- f. Restraint of PVC pipe spigot-end to the mechanical joint of fittings or valves shall be made with the Megalug 2000PV; Tyler/Union TUF Grip TLP; Uniflange 1300C; Sigma One-Lok Models SLC or PVM; or approved equal.

**DUCTILE IRON PIPE**  
**(Push-On-Joint)**

**1. GENERAL**

Ductile iron pipe shall be domestically manufactured in accordance with the latest revision of ANSI/AWWA C-151/A21.51. Pipe shall be furnished in 18 or 20 foot laying lengths. Pipe shall be lined with a standard thickness cement mortar lining and seal coated in accordance with the latest revision of ANSI/AWWA C-104/A21.4 and NSF 61. Pipe outside coating shall be an asphaltic coating in accordance with ANSI/AWWA C-151/A21.51, latest revision. All pipe materials used in potable water systems shall comply with NSF Standard 61. Unrestrained joint pipe shall be either the rubber-ring compression-type push-on joint or mechanical joint.

**2. PRODUCTS**

a. Push-on Joint Pipe

Push-on joint pipe shall be supplied with all joint accessories. Accessories shall include gaskets and lubricant in sufficient quantity for the proper assembly of each joint. Gaskets for push-on joints shall be made of ethylene propylene diene monomer (EPDM) rubber, except: Acrylonitrile butadiene (NBR) gaskets shall be used for potable water mains that are located in soil that is contaminated with low molecular-weight petroleum products or non-chlorinated organic solvents or non-aromatic organic solvents. Fluorocarbon (FKM) gaskets shall be used for potable water mains that are located in soil that is contaminated with aromatic hydrocarbons or chlorinated hydrocarbons. Fluorocarbon (FKM) gaskets shall be used for potable water mains if the soil is contaminated with aromatic hydrocarbons or chlorinated hydrocarbons, and is also contaminated with low molecular-weight petroleum products or organic solvents. All plain ends shall be painted with a circular stripe on the pipe barrel to allow a visual means of checking proper assembly.

- All push-on joints shall be in accordance with ANSI/AWWA C-111/A21.11, latest revision.
- Pressure Class shall be as follows:

Diameter

Min. Pressure Class

MS-13

FY-19

4" to 16"	350
> 16"	250

**3. QUALITY CONTROL AND TESTING**

- a. All pipe shall meet or exceed all hydrostatic, performance and acceptance tests as set forth in ANSI/AWWA C-151/A21.51, latest revision.
- b. When submitting for approval of ductile iron pipe not listed in Section 4, include manufacturer drawings and brochures that clearly indicate size, dimensions, weights, pressure class or thickness class, performance standards, etc. If this documentation is omitted, the ductile iron pipe may be rejected at the sole option of the City.

**4. MANUFACTURER**

- a. All ductile iron pipe, unless specified below, shall be by U.S Pipe, American Cast Iron Pipe Company, McWane Cast Iron Pipe Company, Griffin Pipe Products Company, or approved equal.
- b. All ductile iron pipe shall be domestically manufactured in the United States.

**HDPE TUBING**

**1. GENERAL**

- a. All water service lines two (2) inches in diameter and smaller shall be constructed of high-density polyethylene (HDPE) tubing.

**2. PRODUCT**

- a. Polyethylene extrusion compound from which the PE pipe and tubing are extruded shall comply with the applicable requirements for the Type III, color and U.V. code E, Class C, PE 4710, very high molecular weight polyethylene plastic material manufactured in accordance with AWWA C-901, latest revision, as specified in ASTM D1248. 2-inch and smaller HDPE pressure tubing shall have a color and ultraviolet code E and a minimum cell classification of PE 454474 E as specified in ASTM D3350.
- b. The polyethylene extrusion compound shall be of virgin quality approved for potable water service by the National Sanitation Foundation. The polyethylene extrusion compound shall be manufactured with sufficient and proper ultra-violet color stabilizers.
- c. Polyethylene tubing shall be SDR-9 200 psi.
- d. The standard dimension ratio (SDR) shall be 9 for CTS tubing sizes. The average outside diameter, minimum wall thickness and respective tolerances for any cross-section shall be as

specified in ASTM D2737. The average inside diameter, minimum wall thickness, and respective tolerances for any cross-section shall be as specified in ASTM D2239.

- e. Polyethylene tubing shall be blue and have U.V. color stabilizers so that the pipe is not affected in color or flexibility for a minimum of four (4) years.

**3. QUALITY CONTROL AND TESTING**

- a. Environmental stress cracking resistance testing shall be performed in accordance with ASTM D1693, Condition C, and shall have no failures after 5000 hours duration.
- b. When submitting for approval of HDPE not listed in Section 4, include manufacturer drawings and brochures that clearly indicate size, dimensions, weights, performance standards, etc. If this documentation is omitted, the HDPE may be rejected at the sole option of the City.

**4. MANUFACTURER**

All HDPE tubing shall be manufactured by Performance Pipes "DriscoPlex", Endot EndoPure", Vanguard "Bruiser", Charter Plastics "Blue Ice" or approved equal.

**GATE AND TAPPING VALVES, RESILIENT SEAT**

**1. GENERAL**

All gate valves shall conform to AWWA C-509 or AWWA C-515 and requirements contained herein.

**2. PRODUCT**

AWWA C-509 VALVES (Cast Iron or Ductile Iron) and AWWA C-515 (Ductile Iron)

a. General

- 1) Resilient Seat Gate Vales ("Valves") provided under this specification shall be suitable for installation on ductile iron or cast iron pipe, and C-900 PVC. Valves shall be manufactured in accordance with AWWA C-509 or AWWA C-515, latest editions, as applicable, and as specified herein.
- 2) "Standard valves" shall refer to resilient seat gate valves with mechanical joints at both ends meeting specifications stated herein.
- 3) "Tapping valves" shall refer to resilient seat gate valves with one end mechanical joint, and one end flanged, meeting specifications stated herein.

- 4) Resilient seats for valves shall be made of EPDM rubber.
- 5) Mechanical joint gaskets shall be made of EPDM rubber.

b. Standard and Tapping Valves

- 1) Valves shall be of the non-rising stem type that shall open by turning a two-inch square AWWA operating nut clockwise (open right).
- 2) Valve stems shall be stainless steel and manufactured in accordance with AWWA C-509/C-515. Stems, stem-nuts and wedges shall act independently. Stems shall be sealed by at least two O-ring seals, one located both above and below the thrust collar. Stems shall be provided with low friction torque reducing thrust bearings. Thrust washers may be used to separate the thrust collar from iron surfaces.
- 3) Valve bodies and gates shall be cast iron or ductile iron manufactured in accordance with ASTM A126 or ASTM A536 respectively, and AWWA C-509 or AWWA C-515 as applicable, latest revisions. All internal and external exposed ferrous surfaces of the valve body and gate shall have an epoxy coating applied to a minimum of eight mils, in accordance with AWWA C-550 latest edition. Non-metallic resilient seats shall be bonded to the gate; mechanically attached seats will not be accepted. The method of bonding shall be approved by ASTM D429 A or B as specified in AWWA C-509/C-515. Hollow gates shall be provided with a drain in the bottom to flush the internal cavity of foreign material and stagnant water each time the valve is operated.
- 4) All bonnet bolts, gland bolts, nuts and other trim hardware exposed to the outside environment shall be stainless. Thrust collar tie-rod bolts shall be stainless steel.
- 5) Mechanical joints and accessories shall be manufactured in accordance with AWWA Standard C110 and C111, latest revision, with exceptions noted herein. Mechanical joint bolts-and-nuts shall be manufactured of high-strength, low-alloy steel such as "Corten", "USalloy", or "ACIPalloy". Joints requiring a shorter bolt than called for in AWWA Standard C111 shall be supplied as required. Mechanical joint gaskets shall be made of EPDM rubber.

c. Tapping Valves

- 1) Tapping valve interior waterway shall be a full-opening and capable of passing a full-sized shell cutter through the valve. Tapping valve shall be provided with a tapping-flange and flanged joint accessories. Tapping-flanges shall conform to dimensions and drillings of ANSI B16.1, Class 125, ANSI/AWWA C110/A21.10 latest edition, and NAPF 200.
- 2) Tapping-flange shall have a raised face or lip designed to engage a corresponding recess in a tapping sleeve as defined in MSS SP-60. Mechanical joint accessories shall be provided for mechanical joint end as stated above.



- 3) All tapping valves shall be interchangeable with multiple makes of tapping sleeves.
- 4) Mechanical joint gasket shall be made of EPDM rubber.

### **3. QUALITY CONTROL AND TESTING**

- a. Catalogs and maintenance data shall be provided as required by the Engineer. The catalogs and maintenance data shall contain sufficient detail to serve as a guide in the valve assembly, valve disassembly, the ordering of repair parts, complete valve lubrication and valve maintenance information.
- b. Valves shall meet or exceed test specifications as set forth in AWWA C-509/C-515, latest editions, as applicable.
- c. The Water Department may request samples of proposed valves. Samples shall be supplied and/or returned to the Contractor at the Contractor's expense.
- d. Failure to submit samples within 10 calendar days after the date of a written request shall result in rejection of that item.
- e. Bolt manufacturer's certification of compliance shall be provided with each mechanical joint accessory package.
- f. The resilient seat shall be bubble-tight against a 200-psi water working pressure and maintain zero leakage at all times.

### **4. MANUFACTURER**

- a. Standard valves shall be domestically assembled and shall be Clow F-6100, U. S. Pipe Metroseal 250, AVK Series 25, Mueller Co. (2360 for 2"-12", 2361 for 14"-24"), American Flow Control Series 500 or Series 2500, Kennedy KenSeal 4571, or approved equal.

Tapping valves shall be domestically assembled and shall be equal to or better than Clow F-6114, U. S. Pipe Metroseal 250, Mueller Co. (2360 for 2"-12", 2361 for 14"-24"), American Flow Control Series 500 or Series 2500, Kennedy KenSeal 7571, American AVK Series 25, or approved equal.

### **VALVE BOXES** **(Class 35 Grey Iron)**

#### **1. GENERAL**

Valve boxes provided under this specification shall be designed to provide access to an underground

valve 2-inch operating nut at a depth of 2-feet or greater. Valve boxes shall be suitable for installation in areas subject to heavy vehicle traffic loading.

## **2. PRODUCT**

Valve boxes shall include removable valve box cover with "WATER" label as shown on the Standard Dimension detail titled "Valve Box". All valve boxes shall be manufactured of Class 35 grey iron. All valve boxes shall consist of four parts: valve box covers, risers, top sections, and bottom sections. All valve boxes shall be the same dimension, within manufacturing tolerances, as shown in Standard Dimension Detail "Valve Box".

## **3. QUALITY CONTROL AND TESTING**

When submitting for approval of valve boxes not listed in Section 4, include manufacturer drawings and brochures that clearly indicate size, dimensions, weights, performance standards, etc. If this documentation is omitted, the valve boxes may be rejected at the sole option of the City.

## **4. MANUFACTURER**

Valve box manufacturers shall have a domestic presence. Valve boxes shall be equal to or better than those made by Union Foundry, Sunshine Foundry, or Pipeline Components, Inc.

# **COMPACT ANCHOR FITTINGS - DUCTILE IRON**

## **1.0 GENERAL**

Ductile Iron Compact Anchor Fittings ("Fittings") provided under this specification shall be manufactured in accordance with AWWA Standard C-153 and C-111, latest editions, and as specified herein. Joint accessories shall be provided with fittings.

## **2.0 PRODUCT**

### **a. Tees**

- (1) Both joints on the run of all anchor tees shall be mechanical joint in accordance with AWWA Standard C-111, latest edition.
- (2) All mechanical joints shall be supplied with a joint accessories package (bolts, nuts and gasket) as part of the anchor fitting. MJ Gaskets shall be made of EPDM rubber formulated to resist chloramine degradation. All anchor fittings shall be compatible with mechanical joint connections in accordance with AWWA C-111, latest edition, and shall be capable of mechanical restraint so as to eliminate the need for additional thrust restraints.
- (3) The standard anchor tee branch shall have an anchoring "plain end" which includes an integral

or split follower gland, suitable for connecting to mechanical joint fitting meeting ANSI/AWWA C-111/A 21.11.

b. Anchor Elbow and Anchor Coupling

The Anchor x Anchor elbows and anchor couplings shall have for both ends anchoring "plain ends". These "plain ends" shall have integral or split follower glands, suitable for mechanical joint fittings meeting ANSI/AWWA C-111/A 21.11.

c. Joint Accessories

(1) All T-head bolts and nuts for joints shall be domestically manufactured high-strength, low-alloy steel such as "Corten", "Usalloy," or "ACIPalloy."

(2) All joint accessories shall be furnished with anchoring fittings.

(3) All gaskets shall be EPDM rubber.

b. All anchoring fittings shall be furnished with either: i) a standard thickness cement mortar lining seal coated in accordance with AWWA Standard C-104, latest edition, and an exterior, asphalt coating which conforms to ANSI/AWWA C-151/A21.51; or, ii) have factory-applied fusion bonded epoxy coatings both inside and outside, in accordance with AWWA C550.

c. All fittings shall have a minimum pressure rating of 350 psi.

**3.0 QUALITY CONTROL AND TESTING**

a. All anchor fittings shall meet or exceed acceptance, performance and hydrostatic testing in accordance with AWWA Standard C-153 and C-111, latest editions.

b. When submitting for approval of ductile iron compact anchor fittings not listed in Section 4, include manufacturer drawings and brochures that clearly indicate size, dimensions, weights, performance standards, etc. If this documentation is omitted, the ductile iron compact anchor fittings may be rejected at the sole option of the City.

**4.0 MANUFACTURER**

Ductile iron compact anchor fittings shall be manufactured by U.S. Pipe and Foundry Company, Clow, American Ductile Iron Pipe, McWane, Pipeline Components, Inc. or approved equal.

**COMPACT MECHANICAL JOINT FITTINGS-DUCTILE IRON**

**1. GENERAL**

- a. Ductile iron compact mechanical joint fittings shall be manufactured in accordance with ANSI/AWWA C-153/A21.53, latest revisions and the specifications stated herein. Fittings shall be listed by the National Sanitation Foundation (NSF) and shall conform to the requirements of NSF-61.
- b. Whenever the word "fitting" is used in this specification, it shall mean "Compact Ductile Iron Mechanical Joint Fitting".

**2. PRODUCT**

- a. For fittings larger than 16-inches physical and chemical properties shall be in accordance with ANSI/AWWA C153/A21.53, latest revision. The minimum working pressure for fittings shall be 350. The minimum wall thickness shall not be less than that of pressure class 350 ductile iron pipe.
- b. Joints shall be Mechanical Joint in accordance with ANSI/AWWA C111/A21.11 and C153/A21.53, latest revision, with exceptions noted herein. Mechanical Joint bolts and nuts shall be domestically manufactured of high-strength, low-alloy steel such as "Corten", "Usalloy", or "ACIPalloy". Joints requiring a shorter bolt than called for in ANSI/AWWA C111/A21.11 shall be supplied as required. Gaskets for mechanical joints shall be made of ethylene propylene diene (EPDM) rubber.
- c. Exterior Coating and Interior Lining

Mechanical Joint fittings furnished shall have either of the exterior coating and interior lining systems described below:

- (1) Cement Mortar Lining: Fittings furnished shall have a standard thickness cement mortar lining and be seal coated in accordance with ANSI/AWWA C-104/A21.4, latest revision. Fittings shall be listed by an approved certifying agency as conforming to all requirements of ANSI/NSF 61 and shall have an asphalt exterior coating which conforms to ANSI/AWWA C-153/A21.53.
- (2) Fusion-bonded Epoxy: Fittings shall be coated inside and out with fusion-bonded epoxy, and be in conformance with the requirements of ANSI/AWWA C-116/A21.16 and AWWA C-550, latest revisions. Fittings shall be listed by NSF or by an approved certifying agency as conforming to all requirements of ANSI/NSF 61.

**3. QUALITY CONTROL AND TESTING**

- a. All fittings specified herein shall meet or exceed all hydrostatic, performance, and acceptance tests in accordance with ANSI/AWWA C153/A21.53 latest revision.
- b. When submitting for approval ductile iron compact MJ fittings not listed in Section 4, include manufacturer drawings and brochures that clearly indicate size, dimensions, weights, performance standards, etc. If this documentation is omitted, the ductile iron compact MJ fittings may be rejected at the sole option of the City.

#### 4. **MANUFACTURER**

All manufacturers of ductile iron compact MJ fittings specified herein shall have a domestic presence. The fittings shall be manufactured by U.S. Pipe, Clow, Tyler/Union Pipe, American Ductile Iron Pipe, McWane, Pipeline Components, Inc., Sigma, Star Pipe, or approved equal.

### **MECHANICAL JOINT BOLTS-AND-NUTS**

#### 1. **GENERAL**

All mechanical joint bolts and nuts shall be manufactured in accordance with ANSI/AWWA C-111/A21.11, latest revision, and shall also adhere to the following specification.

#### 2. **PRODUCT**

- a. All mechanical joint bolts shall be a Tee-head design with hexagonal nuts. Dimensions shall be in accordance with ANSI/AWWA C-111/A21.11.
- b. All bolts and nuts shall be manufactured of high-strength, low alloy steel in conformance with ANSI/AWWA C-111/A21.11 and ASTM A242, latest revisions.
- c. All bolts shall be designed for internal and external threads to conform to ANSI/ASME B1.1 and B1.2. Thread form shall conform to the standards and dimensions of the coarse-thread series Unified Coarse (UNC); external threads shall be made in compliance with Class 2A limits, and internal threads shall be made in compliance with Class 2B limits. The Contractor is advised that various HDPE MJ adapters may require longer than standard bolts to complete the installation.

#### 3. **QUALITY CONTROL AND TESTING**

When submitting for approval of mechanical joint bolts and nuts not listed in Section 4, include manufacturer drawings and brochures that clearly indicate size, dimensions, weights, performance standards, etc. If this documentation is omitted, the mechanical joint bolts and nuts may be rejected at the sole option of the City.

4. **MANUFACTURER**

Mechanical joint bolts and nuts specified herein shall be domestically manufactured of Cor-Ten or approved equal by Birmingham Foundry, National Set Screw Corporation or approved equal.

**SOLID SLEEVES**  
**(Ductile Iron, Compact, MJ)**

1. **GENERAL**

Solid sleeves shall be used to join two plain ends of pipe or repair a damaged pipe.

2. **PRODUCT**

- a. Solid sleeve lengths shall be up to 24-inches. The solid sleeve shall be capable of having two plain ends of pipe inserted into opposite ends of the sleeve. The sleeve is then to be sealed to the pipe by a mechanical joint at each end of the sleeve.
- b. All sleeves shall be manufactured of ductile iron. Solid sleeves shall be manufactured in accordance with ANSI/AWWA Standard C-153/A21.53, latest revision. All sleeves shall be rated for a minimum working pressure of 350 psi.
- c. All solid sleeve sealing ends shall be mechanical joints in accordance with ANSI/AWWA C-111/A21.11, latest revision. All joint accessories shall be furnished with the fittings. All bolts and nuts shall be made of high-strength, low-alloy steel such as "Corten", "Usalloy", or "Acipalloy". The gasket shall be for a standard Mechanical Joint, in accordance with ANSI/AWWA C-111/A21.11, latest revisions, and be made of EPDM rubber. The follower gland shall be manufactured from ductile iron at least ASTM A536, Grade 70-50-05 in accordance with ANSI/AWWA C-111/A21.11, latest revision.
- d. All ductile iron compact solid sleeves shall be furnished with a standard thickness cement mortar lining and seal coating in accordance with AWWA Standard C-104, latest revision.
- e. Fittings shall have an exterior, asphaltic coating which conforms to ANSI/AWWA C-153/A21.53.

3. **QUALITY CONTROL AND TESTING**

- a. All solid sleeves shall meet or exceed all testing requirements of ANSI/AWWA C-153/A21.53.
- b. When submitting for approval of solid sleeves not listed in Section 4, include manufacturer drawings and brochures that clearly indicate size, dimensions, weights, performance standards, etc. If this documentation is omitted, the solid sleeves may be rejected at the sole option of the City.

4. **MANUFACTURER**

- a. All ductile iron mechanical joint solid sleeves shall be manufactured by U.S Pipe, Sigma, Tyler/Union, American Cast Iron Company, Clow, or approved equal.

**DRY-BARREL FIRE HYDRANTS**

1. **GENERAL**

All non-rising stem dry-barrel hydrants shall be manufactured in accordance with AWWA C-502, latest revision and these specifications.

2. **PRODUCT**

- a. Hydrants shall have a 5¼-inch main valve opening. The main valve shall be of compression-design and shall open against and closing with pressure. The hydrant shall comply with the requirements of Associates Factory Mutual Insurance Companies and have the "FM" symbol cast into the barrel. The hydrant shall be listed with Underwriter's Laboratories. Hydrants shall open by turning the operating nut counterclockwise.
- b. The hydrant shall be provided with a breakable traffic feature designed so that the nozzle section of the hydrant can be rotated a full 360 degrees. Break couplings shall be made of cast iron, epoxy coated steel, or forged stainless steel. The lower barrel and shoe shall be made of ductile iron, manufactured in accordance with AWWA C-502, latest revision.
- c. All hydrants shall have two 2½-inch bronze nozzles, 180 degrees apart, and one 4½-inch bronze nozzle. All nozzle centerlines shall be at the same elevation. Nozzle outlet threads to be National Standard fire hose coupling screw thread, as described in Appendix A of AWWA C-502. After being coated with an approved anti-seize compound as specified herein, hydrant nozzle shall thread or twist-lock into the hydrant nozzle section; a locking device secures the nozzle. Cast iron or ductile iron nozzle caps provided, with gaskets; nozzle cap nut configuration matches hydrant operating nut. Chains are not provided on nozzle caps.
- d. Hydrant design shall be such that removal of the seat valve drain mechanism, internal rod and all working parts can be accomplished through the top of the hydrant without disturbing the ground-line joint or nozzle section. The shoe inlet shall be mechanical joint, in accordance with AWWA C-111, latest revision. The interior of the shoe and (and upper and lower valves plates, if utilized in design) shall be epoxy-coated in accordance with AWWA C550, latest revision. Accessory kits shall be provided with MJ bolts and nuts and gasket. Mechanical joint nuts and bolts to be manufactured of high-strength, low-alloy steel equal to or better than "Cor-Ten". Main valve gasket and mechanical joint (MJ) gasket made of EPDM.
- e. All above-ground external bolts, studs, and nuts made of low-zinc bronze or stainless steel.

Below-ground bolts, studs and nuts shall be made of high-strength, low-alloy steel as specified herein, or of stainless steel. When bolts are used at the break coupling, they shall not be frangible.

- f. Unless the operating rod is made of stainless steel, the rod shall be sheathed where it passes through a double o-ring seal, sealing the operating threads from the water in the hydrant at all times when the valve is in the open or closed position. Another o-ring shall prevent water from passing between the operating shaft and the sheath. Downward travel of the operating rod and valve assembly shall be controlled by a travel stop device (located in the bonnet only), to prevent the bottom of the main valve from making contact with the epoxy coating of the shoe. Travel stop devices located on the bottom of the operating rod are not acceptable. Bronze operating nuts shall be fully covered with a cast iron or ductile iron weather shield and shall have at least one anti-friction thrust washer to reduce the operating torque when opening the hydrant. The hydrant's bronze main valve seat ring shall thread into a bronze sub-seat or drain ring. The drain outlet for the hydrant shall be eliminated as part of the casting or machining process.
- g. Hydrant operating threads shall be lubricated with anti-seize compound paste upon assembly. Approved anti-seize compounds are Bostik Never-Seez food-grade (888-603-8558), or Permatex part #82448 (food-grade anti-seize compound). (877-376-2839), or MobilGrease FM102 (food-grade). Approval for other anti-seize compounds shall be requested in writing to the Tampa Water Department, accompanied with a Material Safety Data Sheet from the manufacturer of the compound for review. Anti-seize compound shall not contain any heavy metals.
- h. When the hydrant is tested for head-loss as described in AWWA C502, Section 5, latest revision, the maximum head-loss shall not exceed 2.5 psi when flowing at 1000 gpm through the 4 ½-inch nozzle,.
- i. Hydrant coatings shall be as specified in AWWA C502 Section 4.02. Additionally, above-ground exterior hydrant coatings shall be minimum 4 mil Dry Film Thickness white primer coating, compatible with Porter high-grade enamel final paint to be applied in the field.
- j. If manufacturer uses locking keys to secure the lower barrel to the shoe, all locking keys to be fully coated with a Water Department approved anti-seize compound applied upon assembly

**3. QUALITY CONTROL AND TESTING**

- a. The following shall be provided upon request of the Engineer:
  - 1. Certified affidavit from an officer of the manufacturer that hydrant conforms to AWWA C502, latest revision, and these specifications.



2. Certified test results from an independent testing laboratory indicating that the hydrant conforms to Section 2.8 of this specification.
3. Certification of Underwriter's Laboratories listing.
4. Certification of compliance with Associates Factory Mutual Fire Insurance Companies specifications.
5. Two sets of engineering performance data, model catalog, and repair parts manual and price lists. Such data shall contain but is not necessarily limited to: head-loss versus flow curves, hydrant parts and materials, hydrant dimensions. Catalog and maintenance data shall also be supplied in sufficient detail to serve as a guide in the assembly and taking-down of the fire hydrant, the ordering of repair parts, and complete lubrication and maintenance information.
6. Failure to submit any of the above certifications or information with the bid package may result in rejection of the bid.
7. The Water Department may request samples of each hydrant. Samples shall be supplied by and, if requested, returned to the bidder at the bidder's expense. Failure to submit samples within 15 working days after the date of a written request shall result in rejection of the bid.

4. **MANUFACTURER**

- a. Hydrants shall be assembled and tested in their entirety within the United States of America or its territories. The manufacturer of hydrants shall have continuously manufactured, catalogued, sold, and had in service the hydrants in the size proposed for a minimum of five years.
- b. Hydrants shall be manufactured by American (Darling B-84-B 5¼), U.S. Pipe (Metro 250 M94, 5 ¼), Kennedy (Guardian K81-D, 5¼), or American AVK (Series 2780, Nostalgic, 5¼).

**TAPPING SLEEVES**  
**(Mechanical Joint)**

1. **GENERAL**

Tapping sleeves (mechanical joint) shall be constructed of ductile iron. All tapping sleeves shall be suitable for tapping cast iron, ductile iron pipe, C-900 PVC pipe, and all pipe manufactured in accordance with ANSI A21 Standard, AWWA, and these specifications.

2. **PRODUCT**

- a. Tapping sleeves shall be of the split sleeve design; one half shall contain the outlet hub, gasket, and tapping flange; the other shall form the back of the sleeve. A ¾" NPT test plug shall be

provided on the outlet throat of the sleeve for pressure testing the sealed sleeve at 150 psi prior to tapping the pipe. All tapping sleeves shall allow a full-size cutting head to pass through the outlet of the hub.

- b. Tapping sleeves shall be constructed of ductile iron and shall be manufactured in accordance with ASTM A536.
- c. All bolts and nuts joining the two halves of the sleeve shall be high strength, low alloy steel, such as Cor-Ten, in accordance with AWWA C-111, latest revision.
- d. Tapping sleeve connection flanges shall conform to AWWA C-110/ANSI B16.1 Class 125 with counter bore per MSS SP-60 dimensions.
- e. Mechanical joint tapping sleeves shall form a mechanical joint at each end of the sleeve after bolting the halves together. The sleeve shall then be sealed to the pipe by assembling the mechanical joint using split gaskets and follower glands.
- f. All ductile iron sleeves shall have an outside bituminous coating in accordance with AWWA C-110, latest revision.
- g. End and side gaskets shall be made of EPDM rubber.

### **3. QUALITY CONTROL AND TESTING**

When submitting for approval of tapping sleeves (mechanical joint) not listed in Section 4, of this specification include manufacturer drawings and brochures that clearly indicate size, dimensions, weights, performance standards, etc. If this documentation is omitted, the tapping sleeves (mechanical joint) may be rejected at the sole option of the City.

### **4. MANUFACTURER**

Tapping sleeve (mechanical joint) shall be domestically assembled. Tapping sleeves (mechanical joint) shall be manufactured by U.S. Pipe Mechanical Joint Tapping Sleeve, Mueller Co. H-615, American Flow Control or approved equal.

## **TAPPING SLEEVES** **(Steel, "O-Ring" Type)**

### **1. GENERAL**

Tapping sleeves (steel/"O-ring" type) shall be constructed of high strength steel and shall be manufactured in accordance with ASTM A285. Steel tapping sleeves shall be suitable for tapping ductile iron pipe, C-900 PVC pipe, and all pipe manufactured in accordance with ANSI A21 Standards, AWWA, and these specifications.

## 2. **PRODUCT**

- a. All tapping sleeves (steel or “O-ring” type) shall be split sleeve design; one half shall contain the outlet hub, gasket and tapping flange; the other half shall form the back. A ¾” NPT test plug shall be provided on the outlet throat of the sleeve for pressure testing the sealed sleeve at 150 psi prior to tapping the pipe. All tapping sleeves shall allow a full-size cutting head to pass through the outlet of the hub.
- b. All bolts and nuts joining the two halves of the sleeve shall be high strength, low alloy steel, such as Cor-Ten, in accordance with AWWA C-111, latest revision.
- c. All tapping sleeve connection flanges shall be a Class 125 flanged joint, conforming to AWWA C207 Class D, ANSI 150 lb. with a counter bore per MSS SP-60 dimensions.
- d. Tapping sleeves shall seal to the pipe by the use of a confined "O-ring" gasket around the tap opening between the sleeve and pipe or by a full circumferential gasket between the sleeve and pipe. Gasket shall be made of EPDM rubber.
- e. All steel tapping sleeves shall be finished with fusion-bonded epoxy coating both inside and outside, in accordance with AWWA C-550, latest revisions.

## 3. **QUALITY CONTROL AND TESTING**

When submitting for approval tapping sleeves (“o-ring” type) not listed in Section 4, include manufacturer drawings and brochures that clearly indicate size, dimensions, weights, performance standards, etc, which completely substantiates the tapping sleeves compliance with this specification. If this documentation is omitted, the tapping sleeves may be rejected at the sole option of the City.

## 4. **MANUFACTURER**

Tapping sleeve (steel/”o-ring” type) manufactures shall be domestically assembled. Tapping sleeves (steel/”o-ring” type) shall be manufactured by JCM 412, Smith Blair 622, Ford Meter Box FTSC, Dresser 610, Mueller H615, U.S. Pipe T9, or approved equal.

## **LINE STOPS**

### 1. **GENERAL**

Line stops shall be used to isolate sections of water mains in order to keep customers in service during water main tie-ins, water main repairs and to compensate for broken valves. The water mains shall remain under pressure during the installation and use.

Line stops shall be constructed of ductile iron or stainless steel (carbon steel is acceptable subject to Engineer approval). All line stop bodies shall be suitable for tapping cast iron, asbestos cement pipe

(12" and smaller), ductile iron pipe, C-900 PVC pipe, and all pipe manufactured in accordance with ANSI A21 Standard, AWWA, and these specifications. Line stops on asbestos cement pipe, on pipe greater than 8" and on pipe with taps the same size shall be mechanical joint.

Line stops (steel/"O-ring" type) shall be constructed of high strength steel and shall be manufactured in accordance with ASTM A285. Line stops shall be suitable for tapping ductile iron pipe, C-900 PVC pipe, and all pipe manufactured in accordance with ANSI A21 Standards, AWWA, and these specifications.

## **2. PRODUCT**

- a. Line stop fitting shall be full encirclement, pressure retention type split tee. It shall consist of two segments – an upper flange saddle plate and a lower saddle plate. All bodies shall have a 3/4" NPT test plug to verify all seals are secure prior to tapping. Cover plate gasket shall be EPDM. Completion plug o-ring shall be EPDM. Gasket shall be molded from elastomer compounds that resist compression setting and are compatible with water in the 32 to 120 deg. F temperature range.
- b. Line stop sleeve shall have a full-circle rubber gasket and a flanged outlet for bolting to the line stop tapping valve. Sealing may be accomplished by either split end gaskets and mechanical joint ends or a single rubber gasket around the tap opening.
- c. Nuts-and-bolts shall be stainless steel.
- d. Outlet flange shall be ductile iron, stainless steel, or machined from a 150 lb. forged steel flange (ASTM A181 or A105) or from pressure vessel quality steel plate (ASTM A285, Grade C), be flat-faced and drilled per ANSI B16.5

## **3. QUALITY CONTROL**

- a. Catalogs and manufacturer data shall be provided as required by the Engineer. The catalogs and maintenance data shall contain sufficient detail to serve as a guide in the line stop installation and the ordering of repair parts.
- b. The Water Department may request samples of proposed line stops. Samples shall be supplied and/or returned to the Contractor at the Contractor's expense.
- c. Failure to submit samples within 10 calendar days after the date of a written request shall result in rejection of that item.
- d. The sleeves shall be rated at 150 psi hydrostatic with a test pressure of 200 psi. and maintain zero leakage at all times.

## **4. MANUFACTURER**

Line stops shall be domestically assembled equivalent to or better than Advanced Valve Technologies EZ Valve II, Hydra-Stop, JCM 440 Line Stop, or approved equal.

## **TAPPING SADDLES**

### **1. GENERAL**

Tapping saddles shall be constructed of heavy gray cast iron, or ductile iron, with the attachment straps, nuts, and washers constructed of corrosion resistant alloy steel in accordance with AWWA C-111, latest revision.

### **2. PRODUCT**

- a. All tapping saddles shall be suitable for Class C & D gray cast iron, ductile cast iron pipe, and all pipe manufactured in accordance with ANSI A21 Standards.
- b. Tapping saddles shall seal to the pipe by the use of a confined "O- ring" gasket, and shall be able to withstand a pressure of 150 psi with no leakage in accordance with AWWA C-110, latest revision. A 3/4" NPT test plug shall be provided for pressure testing.
- c. The outlet branch flange shall be Class 125 flange joint with a counter bore per MSS SP-60 dimensions.
- d. Tapping saddles shall have outside bituminous coating in accordance with AWWA C-110, latest revision.

### **3. QUALITY CONTROL AND TESTING**

When submitting for approval a tapping saddle not listed in Section 4, include manufacturer drawings and brochures that clearly indicate size, dimensions, weights, performance standards, etc. If this documentation is omitted, the tapping saddle may be rejected at the sole option of the City.

### **4. MANUFACTURER**

Tapping saddles shall be manufactured by American Ductile Iron Pipe, U.S. Pipe, or approved equal.

## **CITY MATERIALS TESTING FREQUENCY**

### **1. GENERAL**

- a) Contractor is responsible for all testing.

1. TABLE

a) Shows frequency by materials

Item	Test		Test Frequency
Embankment	Optimum Moisture/Maximum Dry Density of soil (proctor) as determined by AASHTO T180.		Per Soil Type
	Density Test within Right-of-Way (R.O.W.).	98% of Maximum Dry Density as determined by AASHTO T180	One per 200' horizontally, in one-foot lifts (1)
	Density Test Outside of R.O.W	95% of Maximum Dry Density as determined by AASHTO T180.	One per 200' horizontally, in one-foot lifts (1)
	Gradation (Sieve Analysis) AASHTO T 27, T 11, ND T 89, ND T90.		Per Soil Type
Utility Trench Backfill – over pipelines and around structures from R.O.W. line to R.O.W. line	Optimum Moisture/Maximum Dry Density of soil by AASHTO T180.		Per Soil Type
	98% of Maximum Dry Density (proctor). Soil mix by AASHTO T180.		(1)(2)
Utility Trench Backfill – over pipelines and around structures outside R.O.W. line	Optimum Moisture/Maximum Dry Density (proctor). Soil Mix by AASHTO T180.		Per Material Type
	95% of Maximum Dry Density as determined by AASHTO T180.		(1)(2)
Stabilized Subgrade	Limerock Bearing Ratio (LBR) as per FM 5-515.		Per Soil Type
	Minimum 40 LBR.		Per Material Type (3)

	Minimum 20 LBR (For Soil Cement Only).	Per Material Type
	Subgrade to be used under soil cement shall have a minimum 20 LBR.	Per Material Type
	Moisture/Maximum Dry Density of soil (proctor).  Proctor as per FM 5-515.	Per Material Type
	98% of Maximum Dry Density as determined by FM 5-515. No tolerance.  Soil Cement - 97% of Maximum Dry Density as determined by AASHTO-T134. No tolerance	(3)(4)
Base (Other than soil cement or crushed concrete)	Limerock Bearing Ratio (FM 5-515).  Minimum LBR 100.	Per Material Type/Per Source
	98% of Maximum Dry Density as determined by FM 5-515. No tolerance.	(3)(4)
<b>Item</b>	<b>Test</b>	<b>Test Frequency</b>
Superpave Asphalt	Mix Design	One per FDOT Approved type
	Temperature	(6)
	Maximum Specific Gravity (FM 1-T209)	One per day.
	Extraction/Gradation (FM5-563/FM 1-T030)	
	Thickness. No core shall be less than the specified thickness.	Three cores per production day.
	Straightedge (FM 5-509)	(7)
	Bulk Specific Gravity (MF 1-T166) 90% of Lab Density for Local	(3) see Nuclear Density Testing

	Roadways (Remove and Replace if not met); and 92% of Lab Density for Collectors and Arterials (Remove and Replace if not met).	
Item	Test	Test Frequency
Soil Cement Base	Mix Design	Per Material Type
	Moisture/Maximum Dry Density of soil (proctor) AASHTO T134	Per Material Type
	97% of Maximum Dry Density as determined by AASHTO T134. No tolerance.	(3)(4)
	Compressive Strength of Specimens	One set of three per material type daily
	Cores Thickness Test	(3)
Crushed Concrete Base	Gradation	Per Type of Material/Source (5)
	Abrasion per FM 1-T096	Per Type of Material/Source
	Limerock Bearing Ratio (LBR) as per FM 5-515. Minimum LBR 150.	Per Type of Material/Source
	98% of Maximum Dry Density as determined by FM 5-515. No tolerance.	(4)
Concrete	Temperature (ASTM C1064)	One per set of cylinders
	Slump (ASTM C143)	One per set of cylinders
	Air Content (ASTM C231 or C173 as applicable)	One per set of cylinders
	Compressive Strength Cylinders (ASTM C31 and C39)	One set of four (6x12) inch or one set of five (4x8) inch cylinders for 100 cubic yards or fraction thereof, per class of concrete. Tested as follows: 1 at 7 days, 2 at 28 days, and 1 as reserve tested 56 days is necessary. Three cylinders shall be tested at 28 days if 4x8 inch cylinders are used.

- 1) *Recommend testing methods: FM 1-T238, FM- T204, ASTM D6938, and ASTM D2937.*
- 2) *Tests shall be located no more than 200 feet apart. Tests shall be performed on each lift, except that tests shall not be further apart than one foot vertically. Field Densities shall be taken over all road crossings. Field Densities for Sanitary Lines shall be staggered to include results over service laterals. There shall be a minimum of one test series for each one foot of lift over pipeline between manholes. Tests around structures shall be spiraled in one-foot lifts. For all type pipe, fill to be compacted beneath the haunches using suitable tampers. For pipe less than 24 inches in diameter, backfill in appropriate lifts and*



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*test from the top of the pipe and every one foot vertically thereafter. For pipe 24 inches to 72 inches in diameter, backfill in appropriate lifts and test from the springline and every one-foot vertically thereafter. For pipe larger than 72 inches, tests shall begin one foot above the base of the trench.*

- 3) *Tests for base material shall be located no more than 200 feet apart. Tests for asphalt pavement shall be located no more than 500 feet apart. There shall be no less than one test per street. No core shall be less than specified minimum thickness. Nuclear Density Tests may be acceptable if approved by the City Engineer/Engineer of Record.*
- 4) *Testing for the subgrade and base compaction shall be located no more 200 feet apart and shall be staggered to the left, right, and on the centerline of the roadway. The City Engineer may reserve the right to sample and test any material utilized in the construction of the roadway. Testing shall be in accordance with the Testing Schedule and applicable City of Tampa Standard Specifications and latest FDOT Standard Specifications for Road and Bridge Construction. Inspection of the subgrade and base shall be conducted by the City Inspector, and shall be approved by the City Engineer/Engineer of Record prior to the base and asphalt construction respectively. Note: The City reserves the right to sample and test any material during construction.*
- 5) *Materials requirements as per latest FDOT Standard Specifications for Road and Bridge Construction*
- 6) *Continuous for the five first loads if the temperature is within the master range take a temperature measurement every five (5) loads thereafter or as directed by the Engineer.*
- 7) *For City local roads the straightedge test will be required only if requested by the City Engineer/Engineer of Record.*

## CONTRACT ITEMS

### CONTRACT ITEM 0700 SERIES - SOLID WALL C-900 PVC PIPE (DR-18)

The Contractor shall furnish all materials and equipment, construct, test, and maintain complete all pipe sewer as shown on the Plans, specified, and directed by the Engineer.

The work includes all related work and appurtenances required to locate existing sanitary sewer lines and make the connections as shown on the Plans to the proposed lines, alignment survey, maintaining existing sanitary sewer in operation, removal of existing sanitary sewer pipe systems as shown on the Plans or directed by the Engineer, sidewalks, driveways, curbs, curb and gutter, and permanent pavement, excavation, short tunnels, backfill, sheeting, shoring, bracing, dewatering, pipe bedding, pipe fittings, pipework, making all pipe connections, standard pipe cradles and encasements shown on the Plans, installation and removal of plugs and bulkheads, testing, special temporary and nonpermanent pavement replacement, nonpermanent sidewalk and driveway replacement, protection, repair and replacement of utilities and house services, maintenance of traffic, including maintaining access across driveways along the line of the work, protection, trimming and replacement of trees and shrubs, protection, repair and replacement of culverts and other storm water facilities, reconstruction or regrading of road shoulders and ditches, disposal of surplus excavated material, protection of existing structures, making joints between pipes and manholes or structures and all other work incidental to the installation of the sanitary sewer pipe complete in place.

The work does not include sheeting left in place, rock excavation, manholes, surface restoration comprising lawn or permanent pavement replacement, additional earth excavation or additional selected fill materials, driveways, sidewalk and curb or curb and gutter replacement and, when shown on the Plans or ordered, such work will be paid for under other appropriate Contract Items.

The quantity of sewer pipe, in linear feet, to be measured for payment shall be the actual length of new pipelines placed in the work, as shown, specified and directed. Depth of cut for sanitary sewers shall be measured from the original ground surface to the pipe invert. Pipelines will be measured along the centerline of the pipe.

The measured length of gravity sanitary sewers, regardless of pipe material, will include all fittings, short tunnels and manholes with no deductions for wyes, tees and the width of manholes. Deductions in the measured length of gravity sanitary sewers will be made for the width of structures, such as junction boxes, measured from the outside face to the outside face of the structure walls, plus one foot.

The measured length for sanitary force mains will include all fittings and short tunnels with deductions for the laid length of valves.

Payment for Sewer Pipe will be made at the appropriate Contract Item Unit Price per linear foot of the respective pipe.

## CONTRACT ITEM 2400 SERIES - PVC PIPE BENDS, SLEEVES OR REDUCERS

The Contractor shall furnish all materials and equipment, construct, test and maintain pipe bends, sleeves or reducers as shown on the Plans, specified, and directed by the Engineer.

The work includes all excavation, backfill, sheeting, shoring, bracing, dewatering, removal of sidewalks, driveways, curbs, curb and gutter, and permanent pavement, pipe bends, couplings, disposal of surplus excavated material, protection, repair of utilities, house services, trees and shrubs and culverts and other storm sewerage facilities, and all other work incidental to the installation of pipe bends, sleeves or reducers complete in place as shown on the Plans, specified, and directed by the Engineer.

The number of Pipe Bends, Sleeves or Reducers to be measured for payment will be the actual number of respective pipe bends, sleeves or reducers placed in the work.

Payment for Pipe Bends, Sleeves or Reducers will be made at the appropriate Contract Item Unit Price per bend, sleeve or reducer installed.

## CONTRACT ITEM 3300 - BELL RESTRAINT

The Contractor shall provide all labor, equipment, and materials to completely furnish and install bell restraint as shown on the Plans, specified, and directed by the Engineer.

The installation of the bell restraint shall include, but not be limited to, excavating and maintaining the trench; dewatering and bracing and sheeting where required or as directed by the Engineer; furnishing and installing approved pre-cast thrust blocks, field poured concrete thrust blocks, push-on joint restraining devices, wedge action restraint fittings or flange joint restraints, approved manufactured restrained joints, backfilling and compacting the trench, and all incidentals necessary to complete the work complete and in place.

Payment for installation of manufactured restrained joints shall be for each pipe to pipe bell and spigot joint assembled and does not include fitting joint restraint which is included in the cost of the fittings. No additional payment will be made for manufactured restrained joint pipe.

Concrete thrust restraints shall not be accepted.

Payment shall be made under the appropriate Contract Item Unit Price per bell restraint installed.

## CONTRACT ITEM 3300 - THRUST RESTRAINT

The Contractor shall provide all labor, equipment, and materials to completely furnish and install thrust restraint as shown on the Plans, specified, and directed by the Engineer.

The installation of the thrust restraint shall include, but not be limited to, excavating and maintaining the trench; dewatering and bracing and sheeting where required or as directed by the Engineer; furnishing and installing approved pre-cast thrust blocks, field poured concrete thrust blocks, push-on joint restraining devices, wedge action restraint fittings or flange joint restraints, approved manufactured restrained joints, backfilling and compacting the trench, and all incidentals necessary to complete the work complete and in place.

Payment for installation of manufactured restrained joints shall be for each bell and spigot joint assembled. No additional payment will be made for manufactured restrained joint pipe.

Concrete thrust restraints shall not be accepted.

Payment shall be made under the appropriate Contract Item Unit Price per thrust restraint installed.

#### CONTRACT ITEM 7500 - AIR RELEASE SYSTEM

The Contractor shall furnish all labor, materials and equipment required to install, test and maintain the air release system complete with valve boxes as shown on the Plans, specified, and directed by the Engineer.

The work includes all removal of sidewalks, driveways, curbs, gutters, permanent pavement, excavation, backfilling, sheeting, shoring, bracing, dewatering, pipe bedding, pipe, fittings, valve, corporation stop, connection to force main, valve box, support bracket, top slab, nonpermanent and special temporary pavement replacement, maintenance of traffic, disposal of excess excavated material and all work incidental to the installation of the air release system.

Not included in the work are additional earth excavation or additional selected fill material which, if ordered or specified, will be included for payment under other Contract Items.

Payment for Air Release Systems will be made at the Contract Item Unit Price per air release system installed.

## **SPECIFIC PROVISIONS**

### **SP-1.01 TRANSPORTATION STORMWATER SERVICES (TSS) TECHNICAL SPECIFICATIONS:**

Division II & III of the Florida Department of Transportation Standard Specifications, July 2020 Edition, with revisions provided in the Technical Specification Special Provisions.

The following hierarchy of the contract documents shall apply:

The TSS Technical Specifications shall govern, except as noted herein.

In the case of apparent conflict with the project plans, the Specific Provisions shall govern.

### **SP-2.01 BID ITEMS:**

It is the intent of these Contract Documents that any items of work and all costs for which compensation is not directly provided by a bid item but are incidental to various project items of work, shall be prorated and included in the bid item for which they are required. Failure of the Contractor to follow this procedure shall be basis for rejection of its bid.

### **SP-2.02 WORK DIRECTIVE CHANGE:**

A Work Directive Change is a written directive to the Contractor, issued on or after the date of the execution of the Agreement, and signed by the Engineer on behalf of the City, ordering an addition, deletion or revision in the work, or responding to an emergency. A Work Directive Change will not change the contract price or the time for completion, but is evidence that the parties expect that the change directed or documented by a Work Directive Change will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the contract price or the time of completion.

Without invalidating the Agreement, certain additions, deletions or revisions in the work may, at any time or from time to time, be authorized by a Change Order or a Work Directive Change. Upon receipt of any such document, the Contractor shall promptly proceed with the work involved.

### **SP-2.03 LINES AND GRADES:**

The General Provisions Section G-8.01 and G-8.02 are revised to read as follows:

#### **G-8.01 General:**

All work done under this contract shall be constructed in accordance with the lines and grades as shown on the plans or as directed by the Engineer. The full responsibility for keeping alignment and grade shall rest upon the Contractor.

The Engineer will establish Bench Marks and baseline controlling points only.

#### **G-8.02 Surveys:**

The Contractor shall furnish and maintain, with no additional payment, stakes and other such material as may be required for setting reference marks; and shall, with no additional payment, establish all working or construction lines and grades as required from the reference marks set by a Florida Registered Professional Surveyor and Mapper hired and/or employed by the Engineer, and shall be solely responsible for the accuracy thereof. The Contractor shall, however, be subject to the check and review of a Florida Registered Professional Surveyor and Mapper hired and/or employed by the Engineer the Engineer.

Pay items requiring survey information, such as embankment or excavation, shall be documented by of a Florida Registered Professional Surveyor and Mapper. In addition, plotted cross sections and quantity computations must be supplied and certified. All surveys shall be performed using electronic data collection for data acquisition. All drawings shall be submitted in the most current version of AutoCAD being used by the COT department requiring the survey. All surveys must meet the Minimum Technical Standards set forth by the Florida Board of Professional Surveyors and Mappers in Chapter 5J-17, Florida Administrative Code, pursuant to Section 472.027, Florida Statutes. All surveys must also meet any standards or specifications which may be included as part of the scope of contract.

**SP-2.04 REQUIREMENTS FOR CONTROL OF THE WORK:**

Prior to the start of the work included in this contract, a Preconstruction Conference will be held by the Engineer to be attended by the Contractor and representatives of the various utilities and others for the purpose of establishing a schedule of operations which will coordinate the work to be done under this contract with all related work to be done by others within the limits of the project. The Contractor shall be prepared for this meeting and shall present a comprehensive construction schedule for all items of work to be accomplished, which will be used as the basis for the development of an overall operational schedule and a list of subcontractors and material suppliers to be used on this work.

All items of work in this contract shall be coordinated so that progress on each related work item will be continuous from week to week. The progress of the work will be reviewed by the Engineer at the end of each week, and if the progress on any item of work during that week is found to be unsatisfactory, the Contractor shall be required to adjust the rate of progress on that item or other items as directed by the Engineer.

The Contractor shall conduct operations in such a manner as will result in the minimum of inconvenience to occupants of adjacent homes and business establishments and shall provide temporary access as directed or as conditions in any particular location may require.

Access to adjacent residential, public and commercial properties shall be provided at all times during the contract period.

The Contractor shall restore to its previous condition as directed by the Engineer any private property, City property, or utilities damaged by its construction. No payment shall be made to the Contractor for any required restoration of private property, City property or utilities, unless otherwise noted.

**SP-2.05 REFERENCE STAKES:**

Add the following paragraph to General Provision Section G-8.03:

The Contractor shall, with no additional payment, furnish and install reference stakes at all even and half-stations along the project survey baseline.

These stakes shall be maintained for the duration of construction for the purpose of the Engineer's reference.

**SP-2.06 CONTRACTOR'S WEEKLY SCHEDULE:**

In order that the Contract Administration personnel may be advised of the work to be performed, the Contractor may be required to submit weekly to the Engineer of its designated representative a schedule indicating the proposed work plan for the forthcoming week. Such shall be delivered to DT&SS not later than Friday preceding the work plan week unless other arrangements have been made for this submittal.

**SP-2.07 MONTHLY CONSTRUCTION ESTIMATES AND RELEASE OF LIEN:**

The Contractor shall prepare on or about the first day of each month an estimate of the work completed in the preceding month. Said estimate shall be prepared on standard forms provided by the Engineer, and three (3) signed originals shall be provided by the Contractor. Any disputed quantities shall be adjusted as directed by the Engineer prior to each partial payment, as provided for in Article 10.05 of the Agreement.

Certification that all subcontractors have been paid for the previous month's work shall be submitted with each partial payment request on forms provided by the Engineer.

An update of the overall project schedule shall be submitted with each partial payment request.

**SP-2.08 CONTRACTOR'S REPRESENTATIVE:**

Add to Article 8.02 of the Agreement:

"The Contractor shall submit in writing to the Construction Engineer the name of its duly authorized representative who will be present on the job during all work activities and is authorized to make decisions for the Contractor. Any change in the contractor's representative shall require written notification to the Construction Engineer prior to such change".

**SP-2.09 NOTICE AND SERVICE THEREOF:**

All notices, which shall include demands, instruction, requests, approvals, and claims, shall be in writing.

Any notice to or demand upon the Contractor shall be sufficiently given if delivered to the Contractor's representative at the construction site or to the office of the Contractor specified in the bid (or to such other offices as the Contractor may, from time to time, designate to the City in writing), or if deposited in the United States mail in a sealed, postage-prepaid envelope, or delivered, with charges prepaid, to any telegraph company for transmission, in each case addressed to such office.

All notices required to be delivered to the City shall, unless otherwise specified in writing to the Contractor, be delivered to the Engineer, 3806 E. 26th Avenue, Tampa, Florida 33605, and any notice to or demand upon the City shall be sufficiently in the United States mail in a sealed, postage-prepaid envelope, or delivered with charges prepaid to any telegraph company for transmission, in each case addressed to said Engineer or to such other representative of the City or to such other address as the City may subsequently specify in writing to the Contractor or to its representative at the construction site for such purposes.

Any such notice or demand shall be deemed to have been given or made as of the time of actual delivery or (in the case of mailing) when the same should have been received in due course of post or (in the case of telegram) at the time of actual receipt, as the case may be.

**SP-2.10 CONTRACTOR'S FIELD OFFICE:**

The Contractor will not be required to provide a Contractor's field office.

The Contractor, however, shall have Contract Documents, the latest approved working drawings, standard drawings and a representative of the Contractor available at the site during regular working days.

**SP-2.11 ENGINEERING'S FIELD OFFICE:**

An Engineering field office shall not be required for this project.

A functional, portable cellular telephone and separate lockable sanitary facilities shall be provided to the Engineer for use throughout the duration of the project.

All costs associated with the cellular telephone (local calls only) and sanitary facilities shall be borne by the Contractor. No separate payment shall be made for these services.

**SP-2.12 DAMAGE TO ADJACENT STREETS:**

Any streets (including detour routes) consisting of travel lanes, curbs, gutters and shoulders, outside the project area (not designated for construction), which are determined by the Engineer to have been damaged due to negligent construction related operations and/or equipment, shall be restored by the Contractor to its original or better condition without any cost to the City and to the satisfaction of the Engineer.

**SP-2.13 PROJECT PHOTOGRAPHS:**

The Contractor will not be required to furnish photographs of the project; however, the Engineer may or may not take photographs of the area immediately prior to and after completion of the construction for record and information. To assure that there will not be any conflict with this photography, the Contractor shall not perform clearing operations or actions which will disturb any street or area within the project until the Engineer has been advised thereof and has had adequate opportunity to perform the desired photography.

**SP-2.14 PRECONSTRUCTION VIDEO:**

Prior to commencing work, the Contractor shall submit to the Engineer for approval, a DVD containing a continuous color video recording including complete coverage of pre-construction conditions of all surface features within the construction's zone of influence, (including detour routes) simultaneously produced audio commentary and electronic display of time and date. The video recording shall be sufficient to fulfill the technical and forensic requirements of the project and provide continuous unedited coverage, establishing locations and viewer orientation with clear, bright, steady and sharp video images with accurate colors free of distortion or other imperfections. The DVD must be accompanied by a detailed log of its contents including date, locations, video counter numbers and features. No work shall be allowed until the completed DVD and log are approved by the Engineer.

The costs associated with preparing the project's preconstruction video shall be included in the contract price for Mobilization.

**SP-2.15 PROJECT CLEAN-UP:**

Clean-up on this project is extremely important and the Contractor will be responsible for keeping the construction site neat and clean with debris being removed regularly as the work progresses.

If project cleanliness and/or dust control reaches an unacceptable level in the opinion of the Engineer, the Engineer will notify the Contractor in writing. If the Contractor does not act to correct the situation within 4 hours in the case of dust control or within 24 hours in the case of general cleanliness, the Engineer may call upon outside forces to provide the appropriate services. Cost of all such activities shall be charged to the Contractor via contract change order.

**SP-2.16 CITY PERMITS:**

The Contractor shall be responsible for obtaining all applicable City permits for this project. These can include but may not be limited to: Right-of-way permit(s), tree removal/site clearing permit(s), and drainage/earthwork permit(s). The Contractor shall supply any required plans or other information to the issuing department.

The time required to prepare, submit, review, and issue the permits shall be included in the contract time and no payment shall be made for any delay incurred by this process.



Cost for obtaining City permits shall be included in the lump sum cost for mobilization (Item No. 101-1), and no separate payment shall be made. Right-of-way permit fee shall be waived by the City.

All subcontractors working on the project shall obtain their own, separate permits as above.

#### **SP-2.17 DESIGN AND AS-BUILT PLANS:**

The City reserves the right to request the Contractor to provide the Engineer with Project "As-Built plans as follows:

1. All as-built information shall be annotated by a Florida Registered Professional Surveyor and Mapper on a separate layer of an AutoCAD drawing provided by the City, or fully depicted in the form of a new AutoCAD drawing prepared by a Florida Registered Professional Surveyor and Mapper. Annotation of the new drawing files shall be performed according to City Production and Design Support standards, as well as in accordance with the Standards of Practice set forth by the Florida Board of Professional Surveyors and Mappers in Chapter 5J-17 of the Florida Administrative Code, pursuant to section 472.027 Florida Statutes.

Settings shall be as follows: Color: Red, Linetype: Continuous, Font: Romans, Layer Name: AS-BUILT, AutoCAD Menu Name: ACAD.MNU, and File Format: AUTOCAD Release 12.

2. All surveys shall be completed and certified by a Florida Registered Professional Surveyor and Mapper in accordance with the Minimum the Standards of Practice set forth by the Florida Board of Professional Surveyors and Mappers in Chapter 5J-17 of the Florida Administrative Code, pursuant to section 472.027 Florida Statutes.

Survey data shall be submitted by a Florida Registered Professional Surveyor and Mapper, either hired by the Contractor, or in the employment of the Contractor, as electronic data in AutoCAD. ASCII files of digital raw survey data, closure reports, adjustment reports, and/or copies of any handwritten supporting field notes or sketches will be included in the Drawing submittal.

3. "As-Built", or "Record" surveys, as may be required by contract, or agreement, will collect and delineate all constructed improvements within the construction site or corridor (or right of way), so that all constructed improvements may be compared to and contrasted with the design plans and/or construction drawings. All improvements shall be deemed to include, but are not limited to, all roads, pavement, pipes, inverts, ponds, ditches, canals, manholes, handholes, valves, hydrants, poles (utility, telephone, power and otherwise), slabs, inlets, landscaped areas, curbs, gutters, traffic controls, utilities, water meters, sidewalks, right of way lines, and other similar items. Specific items may be addressed as part of contract (expressed or waived) or by written agreement from the Engineer. If Station and Offset delineation is used on the Construction drawings, all locations of constructed improvements, as outlined above shall be depicted in similar fashion so that any discrepancy or deviation can be clearly and readily identified.
4. The Contractor shall comply with the above requirements and shall return one check print set of the plans at the same scale as the construction plans and flash drive(s) to the Engineer for review within three weeks of substantial completion of the project as well as applicable ASCII files of digital raw survey data, closure reports, adjustment reports and/or copies of any hand written supporting field notes or sketches. The project will not be considered to be complete and final payment for the project shall not be made until the as-built information is received and approved by the Engineer. Upon approval, the Contractor shall provide the final project construction plans on disk. No separate payment for meeting the above as-built requirements shall be made.

**SP-3.01 STREET CLOSURE AND MAINTENANCE OF TRAFFIC:**

A City of Tampa permit for construction and maintenance operations within public Rights of Way will be required for every street, lane, or sidewalk closure within City of Tampa Rights of Way.

These permits will establish the minimum requirements for the closure related to number of lanes and/or time of day lanes or street may be closed above what is show in the plans. The Contractor shall adhere to the requirements as described in the permit(s).

The Contractor shall furnish and maintain all necessary signs, pavement markings, barricades, lights, and flagmen necessary to control all vehicular and pedestrian traffic and provide for safety of the public, all in compliance with the current Florida Department of Transportation Roadway and Traffic Design Standards and the FHWA Manual on Uniform Traffic Control Devices.

The Contractor shall observe traffic movements through the work site and inspect all traffic control devices on a regular basis to ensure that all devices are properly installed and functioning as intended.

In cases of closure for street, lane, or sidewalk on the City of Tampa Functionally Classified Network (collectors, minor arterials, and principal arterials), including all State Roads, the Contractor shall provide a maintenance of traffic plan to the City of Tampa, Transportation Division. This plan shall be provided at least seventy-two hours in advance of the closure (excluding weekends) and shall contain the following:

1. Proposed detour routes.
2. Signing of the complete construction area and detour routes.

Advance notice information signs advising the public of scheduled closure of major roadways and/or information signs advising the public of points of closure and detour routes may be required by the Engineer and will be installed at the Contractor's expense.

Payment shall be full compensation for all work, equipment, materials, tools, labor and any incidentals required to maintain safe traffic routes past the work site.

Payment shall be made under

Item No. 102-1 Maintenance of Traffic L.S.

**SP-3.02 TRAFFIC INFORMATION SIGNS:**

The Contractor's attention is directed to Section 10 of the General Provisions, PROTECTION OF WORK AND PUBLIC, and to the consideration therein for providing informative signs indicating the street closures. It is the purpose of such requirements to adequately inform residents and the general public of the closure thereby creating better understanding and relations during the construction.

Street closure signs shall conform to the configuration and dimensions shown on page SIGN-2 which is hereby made part of these specifications.

**SP-3.03 PROJECT SIGN:**

The Contractor shall furnish 2 project sign(s) which shall conform to the general configuration and dimensions as per page SIGN-1 which is made a part of these specifications. The sign(s) shall be maintained in good condition until the completion of the project, and shall be located as instructed by the Construction Engineer.

The cost of furnishing and maintaining the signs shall be included in the various contract items and no additional compensation shall be made.

**SP-3.04 TEMPORARY SIGNALIZATION: - Not Applicable**

**SP-3.05 NIGHT WORK:**

If the Contractor wishes to perform night work, he shall notify the Engineer 72 hours in advance and all night work shall be performed in accordance with the following requirements:

During active nighttime operations, furnish, place and maintain lighting sufficient to permit proper workmanship and inspection. Use lighting with 5 ft-cd minimum intensity. Arrange the lighting to prevent interference with traffic or produce undue glare to property owners. Operate such lighting only during active nighttime construction activities. Provide a light meter to demonstrate that the minimum light intensity is being maintained.

Lighting may be accomplished by the use of portable floodlights, standard equipment lights, existing street lights, temporary street lights, or other lighting methods approved by the Engineer.

Submit a lighting plan at the Preconstruction Conference for review and acceptance by the Engineer. Submit the plan on standard size plan sheets (not larger than 24 by 36 inch), and on a scale of either 100 or 50 feet to 1 inch. Do not start night work prior to the Engineer's acceptance of the lighting plan.

During active nighttime operations, furnish, place and maintain variable message signs to alert approaching motorists of lighted construction zones ahead. Operate the variable message signs only during active construction activities. Include compensation for lighting for night work in the Contract prices for the various items of the Contract. Take ownership of all lighting equipment for night work.

No additional payment shall be made for night work required by the project plans or specifications.

**SP-3.06 TEMPORARY TRAFFIC STRIPING: - Not Applicable**

**SP-4.01 DENSITY REQUIREMENTS: - Not Applicable**

**SP-4.02 STABILIZATION: - Not Applicable**

**SP-4.03 SOIL BORING INFORMATION: - Not Applicable**

**SP-4.04 TEMPORARY STOCKPILING:**

For temporary stockpiling of the excavated material within project limits (and anywhere within City limits) the Contractor shall follow the following procedure.

Public Right of Way

- a. The Contractor will not be allowed to stockpile suitable, excavated material within right-of-way for a period in excess of 30 calendar days. Unsuitable excavated material shall not be stockpiled within public right-of-way for a period in excess of 7 calendar days.

Location other than Public Right-of-Way

- b. The Contractor shall:
  1. Obtain the permission (in writing) from the owner of the property where stockpiling is desired.

2. At its own expense present the above letter and a contour plan of the site to the DT&SS Construction Engineer for approval of stockpiling site.
3. At the conclusion of the stockpiling activity, the Contractor shall obtain a signed letter of release from the property owner that he/she is completely satisfied with the stockpiling operation and with the restoration of their property. A copy of the letter shall be furnished to the Engineer.

The time periods of stockpiling shall be specified by the Contractor in writing.

Upon removal of stockpiled material, the Contractor shall clean up and grade the site to its original contours and conditions.

The City of Tampa shall not be a party to any agreement between the Contractor and private property owner(s).

Regardless of the location of stockpiling, it shall be the Contractor's responsibility to make sure that stockpiling in no way constitutes a public hazard, nuisance and does not interfere with the natural surface runoff in the area.

**SP-4.05 DEWATERING:**

Any dewatering related to this project will not be a separate bid item. The cost shall be included in the price of the facility being installed at that location and/or any related pay items.

**SP-4.06 COMPACTION OF SUITABLE CLAY FILL MATERIAL:**

The Contractor shall have equipment available to properly compact any suitable clay fill material at no additional cost to the City.

**SP-5.01 UTILITY PROTECTION CONSIDERATIONS:**

The Contractor shall protect all utilities and other facilities within and adjacent to the construction as covered in Section G- 1.03, unless a utility firm has conclusively indicated, or such is shown on the plans, that the certain adjustment, removal, reconstruction, or protection of the utility's facility will be performed by that respective utility.

The Contractor shall make every effort to protect all water mains. If the main is damaged or lost, the Contractor shall replace the affected line in strict accordance with the City of Tampa Water Department Specifications and Construction Standards, latest, edition, at no extra cost to the City, and he shall assure that service is maintained at all times.

The Contractor shall make every effort to protect all sanitary sewer lines. If the main is damaged or lost, the Contractor shall replace the affected line in strict accordance with the City of Tampa Department of Sanitary Sewer Specifications and Construction Standards, latest edition, at no extra cost to the City.

It will be the Contractor's responsibility to preserve all existing sanitary sewer services without interruption during the construction of storm sewers or the repairs or reconstruction of sanitary sewers.

When the construction of storm sewers, repair or reconstruction of sanitary sewers has been completed, all temporary connections shall be removed. Sewers shall be cleaned of all settled solids.

The cost of handling sanitary sewers during construction, including cost of all labor, materials, and equipment or other items incidental to completing the job, shall be included in the contract price as bid for the contract items and no separate payment shall be made.

It will be the Contractors responsibility to preserve all existing ditches, swales, force main, gravity main, laterals, etc., and other stormwater appurtenances and facilities pertaining thereto whether owned or controlled by City, other governmental bodies or privately owned by individuals, firms or corporations.

Any temporary measures constructed shall first be approved by the Engineer. The cost of such temporary measures shall be included in the contract price bid for storm sewer items and no separate payment shall be made.

The Contractor shall furnish, install, and remove sheeting and shoring and other protective measures as may be necessary to satisfactorily accomplish the construction of this project. The cost of such sheeting and shoring and other protective measures shall be included in the unit prices as bid for the storm sewer items and no separate payment shall be made.

Compensation for steel sheeting and shoring furnished, installed and removed shall be paid for as extra work in accordance with Article 7.02, EXTRA WORK, on Page A-18 of the Tampa Agreement when approved for use by the Engineer. Such approval shall be for its use only, and the Contractor shall have full responsibility for the design, installation, and removal of the sheeting and shoring. The Contractor shall obtain the services of a registered Professional Engineer to design and certify the sheeting and shoring plans.

#### **SP-5.02 ADJUSTMENT OF UTILITIES AND PUBLIC SERVICE INSTALLATIONS:**

Storm and sanitary sewer manhole covers, valve covers or boxes, water meter boxes, and vaults located within the limits of construction of the pavement or sidewalk area to be constructed, reconstructed or overlaid shall be relocated or adjusted by the Contractor to conform with the new pavement or sidewalk elevation as a part of the work of constructing or reconstructing the pavement or sidewalk and no separate payment will be provided therefor.

Appurtenances of other utilities will be relocated or adjusted by the utility company owning or having jurisdiction over the respective utility.

#### **SP-5.03 REMOVAL OR ADJUSTMENT OF PUBLIC UTILITIES:**

The Contractor will make necessary arrangements with public utility owners, other than City of Tampa Water and Sanitary Sewers, for removal or adjustments of existing utilities, whether shown or not shown on the plans, where such removal or adjustment is determined by the Engineer to be essential to the performance of the required construction, provided normal construction procedures are used by the Contractor.

Relocations or adjustments requested by the Contractor on the basis of the use of a particular method of construction or a particular type of equipment shall not be considered as being essential to the construction of the project if other commonly used methods or equipment could be employed without the necessity of relocating or adjusting the utility. The Engineer will determine the responsibility for any such adjustment of utilities.

Relocations or adjustments requested for the Contractor's convenience or because of delivery of materials to the job site shall be the responsibility of and at the expense of the Contractor.

The Contractor shall be required to coordinate its activities with relocation work by the utilities. A schedule for relocation work will be presented to the Contractor at the pre-construction conference. This schedule may be adjusted to "fit" the Contractor's proposed schedule, but it will include periods during which the Contractor's ability to perform work in the relocation area will be limited, with no additional compensation.

#### **SP-6.01 USE OF CITY WATER SYSTEM:**

The Contractor shall be responsible for obtaining and paying for a Tampa Water Department portable meter that shall be utilized when obtaining water from the City system. These costs shall be included in the various contract items and no additional compensation shall be made.

#### **SP-6.02 WATER MAIN CONSTRUCTION AND/OR OFFSET: - Not Applicable**

**SP-6.03 WATER SERVICE CONNECTIONS: - Not Applicable**

**SP-7.01 SANITARY SEWER CONSTRUCTION: - Not Applicable**

**SP-7.02 SANITARY SEWER HOUSE LATERAL EXTENSION: - Not Applicable**

**SP-8.01 FILLING LOW AREAS WITHIN CITY LIMITS:**

The Contractor under Sec. 21-27 (Permit Requirements) of the City of Tampa Code is prohibited from filling any area public or private (except where shown on the construction plans) within the project limits or anywhere within the City limits without a permit.

For filling and/or grading any area, the owner of such area shall obtain a permit from the Stormwater Management Division, Department of Sanitary Sewers, City of Tampa. The owner shall submit existing and proposed contour plans of the area to be filled and the adjacent land for determination if a permit could be issued. Drainage patterns cannot be altered to the detriment of neighboring property owners or public rights-of-way.

Concurrently the permit application will be reviewed by the Parks Department.

The Contractor shall not deposit any fill material within the City limits without an approved permit. A copy of the permit shall be submitted to the Engineer, by the Contractor prior to any filling or grading operation.

**SP-8.02 ENVIRONMENTAL PROTECTION:**

The Contractor will be held liable for the violation of any and all environmental regulations. Violation citations carry civil penalties and in the event of willful violation, criminal penalties. The fact that the permits are issued to the City does not relieve the Contractor in any way of its environmental obligations and responsibilities.

**SP-8.03 CONFLICT STRUCTURE: - Not Applicable**

**SP-8.04 REINFORCED CONCRETE PIPE/BOX:**

All reinforced concrete pipe, reinforced concrete arch culverts, storm drain, and sewer pipe, all reinforced concrete elliptical pipe and all pre-cast reinforced concrete box sections shall be inspected and accepted by a testing laboratory approved by the Engineer.

Each pipe/box shall bear the stamp of acceptance of the testing laboratory and the Engineer shall be supplied with a copy of each inspection report, including a certification of "D-load", absorption test and conformance to the dimensional and all other designations of ASTM specifications. The cost of such inspection services shall be included in the unit prices for the respective pipe/box items.

Unless specified otherwise on plans, or directed by the Engineer, all storm sewer and culvert pipes shall be ASTM Class III, B wall thickness. All steel shall be grade 60.

All joints in elliptical concrete pipe and round R.C.P. shall be provided with filter fabric or concrete jacket as per F.D.O.T. Standard Plans No. 430-001 and as directed by the Engineer. Filter fabric shall be provided at all joints, except the last two joints not supported by a structure; these joints shall be provided with a concrete collar.

The cost of the filter fabric jackets and concrete collars shall be included in the unit cost of pipe. No extra payment will be paid for such jackets or collars.

All round and elliptical reinforced concrete pipe and all pre-cast concrete box sections shall be manufactured and installed without lift holes. The Contractor shall install the pipe/box with the use of slings, hooks or other methods approved by the Engineer.

All round and elliptical reinforced concrete pipe shall be manufactured without visible corrugations on the internal wall. Any pipe with visible corrugations on the internal wall shall be rejected.

**SP-8.05 CONSTRUCTION OF PAVED SUMP BETWEEN INLET AND EDGE OF PAVEMENT:**

Whenever the plans indicate construction of a modified inlet, the Contractor shall construct a standard curb inlet with a concrete apron as shown in the details, the addition of the concrete apron being the only distinction between a standard inlet and a modified inlet.

If the edge of the concrete apron will be located immediately adjacent to the edge of existing asphalt pavement, and that pavement is not to be repaired or replaced as part of the construction, the Contractor shall saw cut the asphalt pavement to provide a neat clean edge and the concrete apron shall use that edge as part of the form.

If the edge of the concrete apron does not touch the edge of existing pavement, the Contractor shall construct a transitional apron, with 3:1 mitered edges, to connect the edge of the concrete apron to the edge of pavement. This transitional apron shall be constructed of the same material composition as the existing pavement.

All costs to construct the required concrete apron and any required transitional apron shall be included in the contract bid item of that modified inlet and no additional payment shall be made.

Wherever the plans indicate an inlet, either curb or grating type, to be placed outside the edge of existing pavement or curb limit so as to be in proper position for future street widening, the Contractor will be required to construct a paved sump between the edge of such existing pavement and inlet opening. The type of pavement for such sump areas shall be similar and equal to that of the adjacent roadway to which it is connected. Payment shall be made under the applicable items for street replacement.

**SP-8.06 DRAINAGE STRUCTURES:**

1. All inlets and manholes shall, unless otherwise directed by the Engineer, be constructed as per design plans and applicable design standards. All manholes shall be Traffic Bearing type. It shall be the responsibility of the Contractor to assure that the designated sizes of the drainage structures meet the following criteria:
  - a. The minimum distance from the top of the opening for the highest pipe to the bottom of the top slab shall be ten inches (10"); 12"+ from top of pipe to bottom of top slab, before "stack" is used.
  - b. The minimum diameter for stacks shall be as follows:  
  
Twenty-four inches (24") for four feet (4') heights, Thirty-six inches (36") for four feet (4') to six feet (6') heights, and Forty-eight inches (48") for heights over six feet (6').  
  
The stacks shall be symmetrical about the openings, five inches (5") minimum wall thickness, reinforced, and keyed (unless constructed of brick) as per the appropriate FDOT standard.
  - c. The minimum distance between pipe openings shall be nine inches (9").
  - d. For four-sided structures having openings in one or more corners, individual shop drawings must be submitted for prior approval.
2. If warranted by field conditions and directed by the Engineer, the Contractor shall, at such locations, construct rectangular brick drainage structures (in place of concrete drainage structures), according to the standards specified below:

Brick construction shall be as follows:

- a. Wall thickness minimum eight inches (8") up to eight feet (8') height, unless specified otherwise.
  - b. Wall thickness minimum twelve inches (12") up to twelve feet (12') height, unless specified otherwise.
  - c. Brick shall be laid in 1:2 (Portland cement-sand) mortar.
  - d. Before laying the bricks in mortar, the bricks shall be thoroughly sprinkled with clean water (not to saturation extent).
  - e. Brick for manhole and inlet structures shall be laid in stretcher courses, with every sixth course a header course.
  - f. All brick structures shall be plastered smooth inside and outside with 1/2" thick, 1:2 (Portland cement-sand) mortar.
  - g. No "unsound" brick shall be used. As a test, if a light hammer blow, with the brick held lightly in hand, does not produce a uniform crisp ringing sound, the brick shall be construed to have crack(s), or otherwise unsound and shall be rejected.
  - h. All bricks shall be solid clay.
3. No additional compensation shall be paid for brick structures.
  4. For all types of manholes, the top and bottom slabs shall be as per applicable D.O.T. standards, even if brick is allowed to be used in the manhole walls. The following criteria shall apply to slab thicknesses and steel reinforcements:
    - a. Top and bottom slabs shall have the same thicknesses and reinforcements in any manhole structure.
    - b. The minimum slab thickness and reinforcement shall be: 8" thick and #6 bars at 6" centers both ways.
    - c. 4'x6' or larger manholes including circular manholes with inside diameter of 5.0' or larger shall have 10" thick slabs with #7 bars at 6" centers both ways.
    - d. Unless specified on the plans, four sided structures with both inside dimensions in excess of 8.0' and circular structures with inside diameter in excess of 8.0' shall not be covered by D.O.T. and the above criteria.
  5. All grate inlets shall conform to the City of Tampa design standards.
  6. Grates on inlets, as well as all other structures, shall be Traffic Bearing Type, unless specified otherwise, and subject to approval of the Engineer. All grate inlets shall be fitted with an approved metal frame at the top to seat the grates.
  7. All Type-P manholes shall be bid at one average unit price regardless of size and shape. Similarly, all Type-J manholes will be bid at one average unit price regardless of size and shape unless indicated otherwise in the proposal.
  8. Vertical support columns (one in case of Type 5 inlet) shall be constructed by the contractor, as a part of the D.O.T. Type 5 and 6 curb inlets, where and as directed by the Engineer.



9. The Contractor, if so directed by the Engineer in order to better meet site requirements, shall construct B-S-1, B-R-2, B-V-1, or B-R-1 type curb inlets in lieu of D.O.T. Type 5 and 6 curb inlets and vice-versa without additional cost to the City. P-5 and P-6 inlets shall have 3'-6" x 3'-6" substructures unless oversize pipe is to be accommodated or otherwise directed by the Engineer.

Side openings in curb and grate type inlets may be specified in the plans to meet site conditions. The Contractor shall provide such opening without any additional cost.

10. When precast drainage structures are requested as substitutions for poured in place concrete structures, Contractor shall meet the following additional requirements:
- a. Minimum height of the base structure (manhole or inlet barrel) unless restricted by design, shall be 5'-0" before extending the structure height by another precast "barrel". The minimum height of the top (extension) precast "barrel" shall be 1'-6". "Barrel" extensions of less than 1'-6" height shall be cast in place with continuous reinforcement.
  - b. Four-side structures may be considered as an alternate to circular structures, but not the reverse.
  - c. For City type curb inlets, unless specified otherwise, directed by the Engineer, or to accommodate larger pipes, the Contractor may use 3'x4' (inside dimensions) substructures. This structure shall have same slab and wall thicknesses and steel reinforcing as specified for "Type E" grate inlet.
  - d. When circular structures are precast in accordance with ASTM C478, the following limitations will apply:
    - (i) Maximum inside diameter shall not exceed 96".
    - (ii) Minimum wall thickness for 42" and 48" diameter substructures shall be 6"; 7" for 72" diameter, 8" for 84" and 96" diameters.
    - (iii) Vertical reinforcement in walls shall be equal in area to the required circumferential reinforcement area. Reinforcement spacing shall not exceed 12" O.C. in either direction.
  - e. The location of the pipe holes and adequate basic substructures height, unless directed otherwise by the Engineer, shall be the responsibility of the Contractor.
  - f. Contractor shall submit shop drawings only as specified below:
    - (i) One each-typical for different type of structures.
    - (ii) For structures directed by the Engineer, and/or requiring change with respect to design plans, or as otherwise required by these specifications.
  - g. No compensation shall be paid to the Contractor for precast drainage structures which are unusable due to site conditions or changes in plans.
  - h. Provide material testing acceptance reports by a licensed private laboratory verifying:
    - (i) That the structures were constructed in accordance with detail shown on the plans and/or typical Drawings.
    - (ii) Specific reference shall be made to the exact design criteria adhered to; if more than one, identify which criteria applies to which structures.

- (iii) Identify the project title, project number, file number, date cast, structure, plan sheet number and station.
- (iv) Reinforcement size, spacing, amount and cover.
- (v) Concrete placement, curing and strength.
- (vi) The testing laboratory stamp shall be placed on each structure prior to shipment.

11. All manhole and inlet structures shall be set on a minimum of a six inch thick layer of compacted number 57 size coarse aggregate unless noted otherwise in the plans or specifications or unless the Engineer determines a thicker layer is required due to soil and/or water conditions.

Payment for the six inch thick layer of stone shall be included in the price of the structure. Payment for thicker layers of stone shall be from the Selected Bedding Material (Stone) pay item, if available, or as extra work.

**SP-8.07 RIP-RAP: - Not Applicable**

**SP-8.08 STANDARD FOR FILTER FABRIC: - Not Applicable**

**SP-8.09 CONNECTION TO EXISTING INLET OR MANHOLE: - Not Applicable**

**SP-8.10 EROSION CONTROL PLAN:**

In addition to the requirements of Section 104, the Contractor shall be required to submit an erosion control plan to the Engineer at the time of the preconstruction conference. The erosion control plan shall indicate in detail all measures proposed by the Contractor to meet its erosion control obligations, including all items required to meet permitting conditions for the project. Any phasing of the erosion control plan shall also be shown.

The cost of providing, revising and updating the erosion control plan shall be included in the unit costs of the various contract items and no separate payment shall be made.

**SP-8.11 CONCRETE STRUCTURES AND CONCRETE BOX CULVERTS: - Not Applicable**

**SP-8.12 DRAINAGE STRUCTURE AND PIPE BEDDING: - Not Applicable**

**SP-9.01 EXISTING SIDEWALKS, DRIVEWAYS AND PARKING AREAS:**

The Contractor shall meet existing sidewalks, driveways and parking areas (concrete or asphalt) when possible with the proposed street replacement. At locations where existing sidewalks and driveways are not at the same elevations as the new grades, the Contractor may be required to reconstruct a portion of the sidewalk or driveway as directed by the Engineer. (When existing driveway is of asphalt type, a base of 6" thickness shall be constructed with a 1" thick asphaltic concrete surface course.)

Payment will be as per the applicable contract unit bid prices for concrete sidewalk 4", concrete driveway 6", 6" base, and asphaltic surface course. There will be no payment if existing sidewalks or driveways must be reconstructed due to negligence of the Contractor.

**SP-9.02 PRIME/TACK COAT: - Not Applicable**

**SP-9.03 PAVEMENT REPLACEMENT AND TOTAL RESTORATION: - Not Applicable**

**SP-9.04 CONCRETE CURB OR CURB-AND-GUTTER:**

Expansion joints in concrete curb or curb-and-gutter shall be placed at all inlets, radius points, horizontal and vertical points of intersection (P.I.'s), and as otherwise directed by the Engineer. They shall be located at intervals of 100 feet between other expansion joints or ends of a run.

**SP-9.05 ASPHALT LEVELING COURSE: - Not Applicable**

**SP-9.06 PAVEMENT MIX DESIGNS: - Not Applicable**

**SP-9.07 USE OF RECLAIMED ASPHALT: - Not Applicable**

**SP-9.09 PEDESTRIAN RAMPS WITH DETECTABLE WARNINGS**

All pedestrian ramps constructed in new sidewalk under Section 522 of the FDOT Technical Specifications shall comply with F.D.O.T. Standard Plans No. 522-002 and 522-001, except that Detectable Warning Strips, a.k.a., domes, for District Seven Construction and Maintenance should be per the FDOT Approved Product List, Specification Number 527 and attached to the concrete with bolt/screw. For detectable warnings, use contrasting color red only. Payment for pedestrian ramps shall be included in the sidewalk concrete pay item. Detectable warnings have a separate pay item.

**SP-10.01 GRASSING AND/OR SODDING: - Not Applicable**

**SP-10.02 TREE REMOVAL: - Not Applicable**

**SP-10.03 LIVE OAK TREES: - Not Applicable**

**SP-10.04 ROOT PRUNING: - Not Applicable**

**SP-10.05 TRANSPLANTING TREES: - Not Applicable**

**SP-10.06 RESTORATION OF LANDSCAPING WITHIN RIGHT-OF-WAY:**

The Contractor shall remove any shrubbery, trees less than 5 inches in diameter, other landscaping, walkways, planters, other landscaping, and irrigation systems which are in conflict with the proposed construction. These items shall be restored, relocated, and/or reconstructed as shown in the plans or as directed by the Engineer.

Cost of removing, restoring, relocating, and reconstructing the above items shall be included in the lump sum price for Clearing and Grubbing, and no separate payment shall be made.

**SP-10.07 TREE PROTECTION:**

Tree barricades shall be constructed and maintained at trees indicated on the plans as "to be protected" and/or as directed by the Engineer. Generally, barricades are to be placed ten (10) feet from the trunk of each protected tree.

Barricades shall be constructed of commercially available pine lumber, as follows: Vertical members shall be 2" x 2" or larger, generally spaced twelve (12) feet apart. Horizontal members shall consist of one (1) 1" x 2" board.

The Contractor shall provide the services of an approved licensed tree professional when it is necessary to trim or cut a branch from a tree.

Payment for tree protection and tree cutting or trimming shall be included in the lump sum price bid for mobilization and/or clearing and grubbing and no separate payment shall be made.

**SP-10.09 TREE TRIMMING:**

In addition to Tree Trimming required in the FDOT Standard Specification Section 110, the Contractor shall trim tree limbs and shrubbery to a height of 8 feet above sidewalks and to the right-of-way in the project area, and as directed by the Engineer.

Cost of trimming and disposal of these items shall be included in the lump sum price for Clearing and Grubbing, and no separate payment shall be made.

**SP-11.02 USE OF EXPLOSIVES: - Not Applicable**

**SP-11.03 EXISTING PUBLIC FACILITIES:**

Existing public facilities that are removed by construction operations under this contract shall be replaced by the Contractor to City of Tampa specifications. These items shall include all public benches, light poles, shelters, roadway signs, etc., and replacement of these items shall be considered incidental to the cost of construction and no separate payment will be made.

**SP-11.04 METAL PRODUCTS: - Not Applicable**

**SP-11.05 WATER FOR DUST CONTROL: - Not Applicable**

**SP-11.09 CONCRETE BLOCK RETAINING WALLS WITH CONCRETE FOOTING: - Not Applicable**

**SP-11.10 MAILBOX RELOCATION:**

All mailboxes within the limits of construction shall be removed and reset or relocated to allow access for mail delivery as directed by the Engineer. Cost of this activity shall be included in the cost of the various contract items and no separate payment shall be made.

**SP-11.11 SIGNALIZATION CONDUIT: - Not Applicable**

**SP-11.12 RESTORATION OF MONUMENTATION:**

The Contractor shall, with no additional payment, re-establish any permanent survey or mapping monumentation which is disturbed or destroyed in the course of the construction project.

**SP-11.13 INSTALLATION OF SIGNALIZATION POLES AND MAST ARMS: - Not Applicable**

**SP-11.14 SIGNALIZATION CONTROLLER AND CABINET: - Not Applicable**

**SP-11.15 VEHICULAR TRAFFIC SIGNAL ASSEMBLIES: - Not Applicable**

**SP-11.16 CONTINGENCY ALLOWANCE:**

Payment from the City Contingency Allowance shall be made only at the direction of the Engineer under:

Item No. 0999 25                      Contingency Allowance      L.S.

## SPECIFIC PROVISIONS

### SPS-12 Releasing Facilities for Use

It is the intent of these Specifications that all newly constructed sewers and appurtenant facilities be placed in service as rapidly as an integrated portion of the facilities can be constructed, inspected and accepted by the Engineer. Acceptance or use by the City of any portion of the facilities prior to final acceptance shall not relieve the Contractor of any responsibilities, regarding such facilities, included in the Contract.

### SPS-37 Data to be Submitted on Pipe

Within ten days after the date the Contractor is issued the Notice of Award and prior to his entering into any subcontract for the manufacture or purchase of any pipe, the Contractor shall submit to the Engineer, in an amount equal to four (2) sets to be retained by the City plus the number of sets desired by the Contractor, the following information:

1. The name and address of the pipe manufacturer and the location of the plant at which the pipe will be manufactured.
2. A general description of and specifications for the pipe and pipe joints proposed.
3. Notarized certificates of manufacture for VCP, PVC, HDPE, and DIP stating conformance to applicable standards and specifications.
4. Any additional information that the Engineer may deem necessary in order to evaluate the qualifications of the manufacturer and to determine the suitability of the proposed pipe to meet the requirements of the Contract Documents.

The Contractor shall not enter into any subcontract for the furnishing of pipe until he has received the Engineer's approval, in writing, of the proposed manufacturer and pipe.

All pipe of specified classes and materials shall be of one kind and shall be produced by a single manufacturer.



**Page 1 of 2 –DMI Payment**  
**City of Tampa – DMI Sub-(Contractors/Consultants/Suppliers) Payments**  
**(FORM MBD-30)**

[ ] Partial [ ] Final

Contract No.: \_\_\_\_\_ WO#,(if any): \_\_\_\_\_ Contract Name: \_\_\_\_\_

Contractor Name: \_\_\_\_\_ Address: \_\_\_\_\_

Federal ID: \_\_\_\_\_ Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

GC Pay Period: \_\_\_\_\_ Payment Request/Invoice Number: \_\_\_\_\_ City Department: \_\_\_\_\_

Total Amount Requested for pay period: \$ \_\_\_\_\_ Total Contract Amount(including change orders):\$ \_\_\_\_\_

Type of Ownership - (F=Female M=Male), BF BM = African Am., HF HM = Hispanic Am., AF AM = Asian Am., NF NM = Native Am., CF CM = Caucasian S = SLBE

Type	Trade/Work Activity	Federal ID	Total Sub Contract Or PO Amount	Amount Paid To Date	Amount To Be Paid For This Period
[ ]Sub [ ]Supplier				Amount Pending Previously Reported	Sub Pay Period Ending Date
				\$	\$
				\$	\$
				\$	\$
				\$	\$
				\$	\$
				\$	\$

**(Modifying This Form or Failure to Complete and Sign May Result in Non-Compliance)**

Certification: I hereby certify that the above information is a true and accurate account of payments to sub – contractors/consultants on this contract.

Signed: \_\_\_\_\_ Name/Title: \_\_\_\_\_ Date: \_\_\_\_\_



## Page 2 of 2 – DMI Payment

### Instructions for completing The DMI Sub-(Contractors/Consultants/ Suppliers) Payment Form (Form MBD-30)

This form must be submitted with all invoicing or payment requests where there has been subcontracting rendered for the pay period. If applicable, after payment has been made to the subcontractor, “Waiver and Release of Lien upon Progress Payment”, “Affidavit of Contractor in Connection with Final Payment”, or an affidavit of payment must be submitted with the amount paid for the pay period. The following will detail what data is required for this form. The instructions that follow correspond to the headings on the form required to be completed. **(Modifying or omitted information from this form may result in non-compliance).**

- **Contract No.** This is the number assigned by the City of Tampa for the bid or proposal.
- **W.O.#** If the report covers a work order number (W.O.#) for the contract, please indicate it in that space.
- **Contract Name.** This is the name of the contract assigned by the City of Tampa for the bid or proposal.
- **Contractor Name.** The name of your business.
- **Address.** The physical address of your business.
- **Federal ID.** A number assigned to a business for tax reporting purposes.
- **Phone.** Telephone number to contact business.
- **Fax.** Fax number for business.
- **Email.** Provide email address for electronic correspondence.
- **Pay Period.** Provide start and finish dates for pay period. (e.g. 05/01/13 – 05/31/13)
- **Payment Request/Invoice Number.** Provide sequence number for payment requests. (ex. Payment one, write 1 in space, payment three, write 3 in space provided.)
- **City Department.** The City of Tampa department to which the contract pertains.
- **Total Amount Requested for pay period.** Provide all dollars you are expecting to receive for the pay period.
- **Total Contract Amount (including change orders).** Provide expected total contract amount. This includes any change orders that may increase or decrease the original contract amount.
- **Signed/Name/Title/Date.** This is your certification that the information provided on the form is accurate.
- **See attached documents.** Check if you have provided any additional documentation relating to the payment data. Located at the bottom middle of the form.
- **Partial Payment.** Check if the payment period is a partial payment, not a final payment. Located at the top right of the form.
- **Final Payment.** Check if this period is the final payment period. Located at the top right of the form.

The following instructions are for information of any and all subcontractors used for the pay period.

- **(Type) of Ownership.** Indicate the Ethnicity and Gender of the owner of the subcontracting business or SLBE.
- **Trade/Work Activity.** Indicate the trade, service, or material provided by the subcontractor.
- **SubContractor/SubConsultant/Supplier.** Please indicate status of firm on this contract.
- **Federal ID.** A number assigned to a business for tax reporting purposes. This information is critical in proper identification of the subcontractor.
- **Company Name, Address, Phone & Fax.** Provide company information for verification of payments.
- **Total Subcontract Amount.** Provide total amount of subcontract for subcontractor including change orders.
- **Amount Paid To Date.** Indicate all dollars paid to date for the subcontractor.
- **Amount Pending, Previously Reported.** Indicate any amount previously reported that payments are pending.
- **Amount To Be Paid for this Period.** Provide dollar amount of dollars requested for the pay period.
- **Sub Pay Period Ending Date.** Provide date for which subcontractor invoiced performed work.

*Forms must be signed and dated or will be considered incomplete. The company authorized representative must sign and certify the information is true and accurate. Failure to sign this document or return the document unsigned can be cause for determining a company is in non-compliance of Ordinance 2008-89.*

If any additional information is required or you have any questions, you may call the Minority Business Development Office at (813) 274-5522.

0 1 2 3 4 5 6 7 8

**Sign Information**

**Building a Better Tampa**

**David L. Tippin Water Treatment Facility  
Caustic Soda Piping Improvements**

*Project provides for Improvements at the David L. Tippin Water Treatment Facility to Improve the reliability and safety of the Sodium Hydroxide System of the water distribution system within the facility.*

\$TBD investment  
Scheduled for completion in TBD 2014

TBD

**Colors**

Blue: Sherwin Williams Naval SW6244  
Green: Sherwin Williams Center Stage SW 6920  
White: Sherwin Williams Pure White SW7005

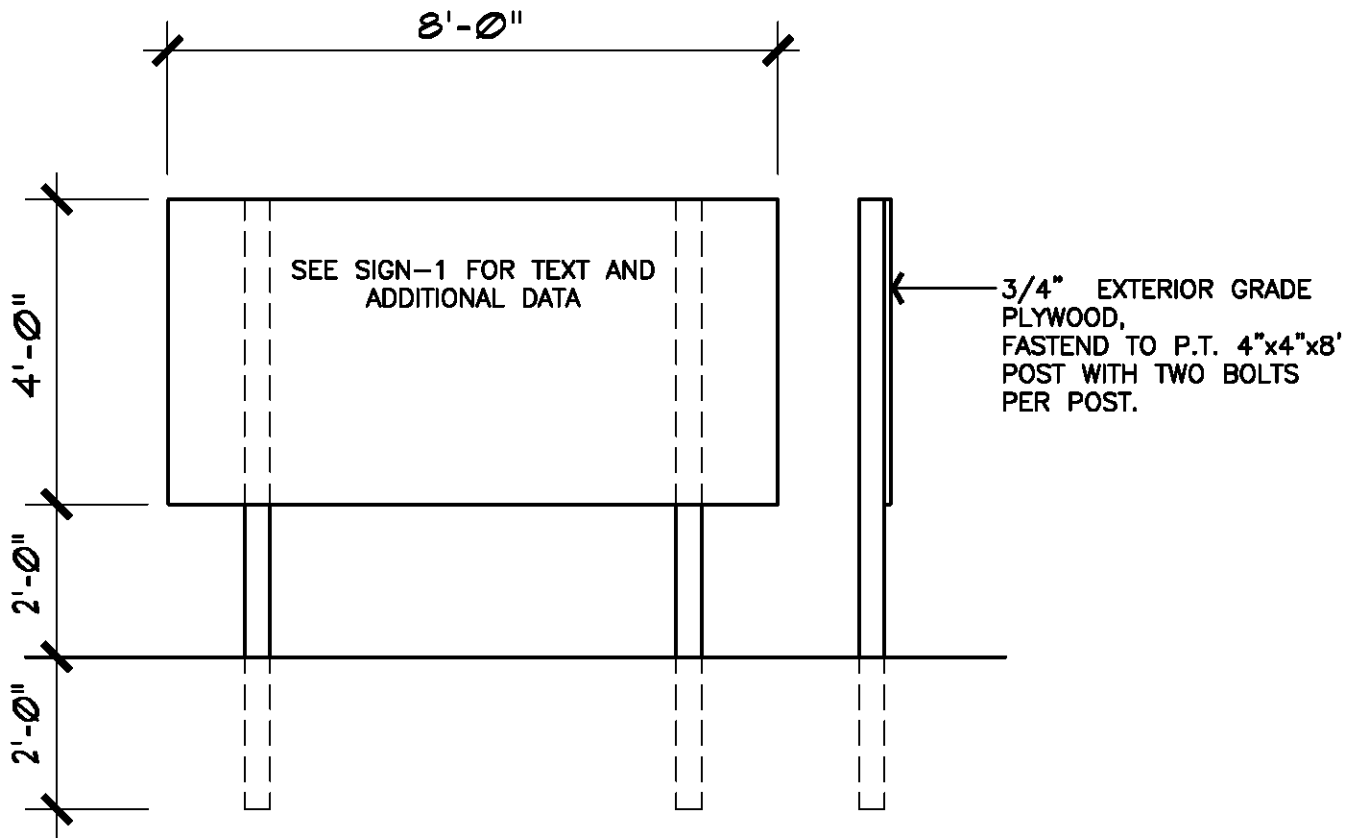
**Font**

Franklin Gothic

**SIGN EXAMPLE ONLY GRAPHIC TO BE DEVELOPED BY CONTRACTOR**

not to scale





## SECTION 10 - DUCTILE IRON PIPE AND FITTINGS

### W-10.01 General

All ductile iron pipe shall meet the requirements of AWWA C151. The type and configuration of pipe bedding for buried pipe shall be as shown on the Plans. Coatings and linings for ductile iron pipe and fittings shall conform to the subsection headed "Coatings and Linings," contained herein. Pipe joints shall be bell and spigot, flanged, or mechanical joint as shown on the Plans.

Ductile iron pipe and ductile iron fittings buried in the ground for force mains or installed in pumping stations shall have a minimum thickness of Class 52 unless specified otherwise as shown on the Plans. Ductile push-on iron pipe and fittings for gravity systems, including house laterals, shall be Class 54 and shall have an interior lining as specified in the subsection "Lining for Ductile Iron Gravity Pipe."

### W-10.02 Flanged Pipe

Flanged pipe shall conform to the requirements of AWWA C115. Flanges shall be ductile iron and shall have long hubs. There shall be no leakage through the pipe threads, and the flanges shall be designed to prevent corrosion of the threads from outside.

### W-10.03 Fittings

All ductile iron fittings shall meet the requirements of AWWA C110 or AWWA C153 and have a pressure rating of 250 psi, or as specified, whichever is larger.

### W-10.04 Flanged Joints

Flanged joints shall meet the requirements of ANSI Specification B16.1. Flanges, flange facing drilling, and protecting shall be as specified for flanged pipe. Bolts and nuts for flanged joints shall be Type 316 stainless steel unless otherwise stated on the Plans or directed by the Engineer.

Except where otherwise directed by the Engineer, gaskets for flanged joints shall be of the full-face type, meeting the requirements of ANSI B16.21. Gaskets shall be Nitrile rubber, also known as Buna-N and NBR, as made by the American Seal & Packing Company, Garlock of EnPro Industries, U.S. Rubber Supply Company, or equal.

### W-10.05 Mechanical Joints

Mechanical joints shall meet the applicable requirements of AWWA C111/A21.11.

### W-10.06 Push-on Joints

Push-on joints shall be of the bell and spigot type which employs a single, elongated grooved gasket to effect the joint seal. Push-on joints shall meet the applicable requirements of AWWA C111.

### W-10.07 Wall Castings, Connecting Pieces, and Special Fittings

Wall castings and connecting pieces, such as bell and bell, bell and spigot, bell and flange, flange and flange, flange and spigot, and flange and flare, shall meet the requirements of ANSI Specification A21.10. Unless otherwise shown or specified, fittings 14 inches and larger shall have a pressure rating of 250 psi.

Where special fittings are required, they shall be of an approved design and shall have the same diameters and thickness' as standard fittings, unless otherwise required, but their laying lengths and other functional dimensions shall be determined by their positions in the pipelines and by the particular piping materials to which they connect.

Where water tightness is essential and at other locations where indicated, wall castings shall be provided with an integrally cast intermediate collar located at the center of the wall.

#### W-10.08 Sleeve-Type Couplings

Except where standard solid sleeves or split sleeves are shown or specified, sleeve-type couplings for ductile iron pipe shall be Style 38 couplings as made by Dresser Industries, Inc., or Type 411 as made by Smith-Blair, or equal. Gaskets shall be of molded rubber, Dresser Plain Grade 27, Smith-Blair 003, or equal. Middle rings shall be without a pipe stop and shall be at least 1/4 inch thick and 5 inches wide for 8-inch and smaller pipe, 3/8 inch thick and 7 inches wide for 10-inch through 30-inch pipe, and 1/2 inch thick and 10 inches wide for 36-inch and larger pipe with follower rings of appropriate thickness, unless otherwise shown or specified.

Sleeve-type couplings shall be shop coated with Dresser Red "D" Shop-Coat, Smith-Blair Standard Blue Shop Coat, or equal nontoxic material compatible with the finished coatings specified.

#### W-10.09 Coatings and Linings

Pipe which is to be buried shall have the standard outside coating specified in AWWA C151-8.1.

Unless otherwise shown on the Plans or specified, all ductile iron pipe and fittings shall be coated with 40 mils of Protecto 401 interior ceramic epoxy, or approved equal.

The weight and class designation shall be painted conspicuously in white on the outside of each pipe, fitting, and special casting after the shop coat has hardened.

#### W-10.10 Thrust Restraints

Unless otherwise shown on the Plans, specified or directed by the Engineer, concrete thrust blocks are not allowed.

Ductile iron pipe and fittings with mechanical joints shall be restrained by a device meeting the requirements of Workmanship and Materials section "Restraining Devices".

Ductile iron pipe and fittings with push-on joints that require restraining shall be Clow F-128 "Super Lock Joint," American Cast Iron Pipe "Lok-Fast Joint," U.S. Pipe and Foundry Company "TR Flex," or equal.

Where the glands are to be buried or not exposed to view, the assembly shall be given 2 heavy coats of asphalt varnish after installation.

#### W-10.11 Lining for Ductile Iron Gravity Pipe

Unless otherwise shown on the Plans or specified, all ductile iron pipe and fittings shall be coated with 40 mils of Protecto 401 interior ceramic epoxy, or approved equal.

#### W-10.12 Polyethylene Encasement

Unless otherwise shown on the Plans, specified or directed by the Engineer, polyethylene encasement shall be installed on all ductile iron pipe and fittings in accordance with AWWA/ANSI C105/A21.5.

Although not intended to be a completely air-and-water-tight enclosure, the polyethylene shall prevent contact between the pipe and the surrounding backfill.

Polyethylene encasement shall be installed in accordance with the pipe manufacturer's instructions, or in a manner acceptable to the Engineer. Polyethylene encasement shall extend 1 foot beyond the joint in both directions (a total of 2-foot overlap) and shall be adhered to said joint with 2-inch wide green marking tape. The slack width shall be taken up at the top of the pipe to make a snug, but not tight, fit along the barrel of the pipe, securing the fold at quarter points. Upon installation of the encasement, any cuts or damaged portions of the polyethylene encasement shall be securely mended with tape or with a short length of polyethylene sheet, or a tube cut open, wrapped around the pipe to cover the damaged area, and secured in place.

Backfill material shall be the same as specified for pipe without polyethylene wrapping; however, extra care should be taken that the backfill be free from cinders, refuse, boulders, rocks, stones, or other materials that could damage the encasement. Special care shall be taken to prevent damage to the polyethylene wrapping when placing backfill.

Because prolonged exposure to sunlight will deteriorate polyethylene film, such exposure prior to backfilling the wrapped pipe shall be kept to a minimum.

#### W-10.13 Ductile Iron Pipe Exterior Coating

All pipe and fittings shall have an exterior asphaltic coating conforming to the following requirements:

Viscosity, KU at 25 degrees C	56-60
Flashpoint, degrees F (TCC)	40 degrees F Min
Dry set to touch, minutes	6
Dry hard, minutes	22

#### W-10.14 Force Main Identification

Ductile iron pipe sanitary force main shall be continuously spiral wrapped with 2-inch wide green stick-on vinyl tape prior to installation for permanent identification purposes. The tape shall have a minimum thickness of 6 mils with a minimum tensile strength of 22 pounds per inch and a minimum adhesive factor of 40 ounces per inch. The pipe shall be clean and dry when wrapped.

\* \* \*

SECTION 15 - LAYING AND JOINTING PIPE  
FOR FORCE MAINS AND SEWERS

W-15.01 General

The installation, delivery, transportation, unloading, and stringing of pipes, fittings, and accessories for force mains and sewers shall be done in accordance with AWWA C600 for ductile iron pipe and ASTM Des: C 12 for clay and concrete pipe and ASTM D 2321 and pipe manufacturer's recommendations for PVC pipe, as modified or supplemented by the specifications of this section and by the details shown on the Plans.

Proper and suitable tools and appliances for the safe and convenient cutting, handling, and laying of the pipe and fittings shall be used.

Suitable fittings shall be used where shown and at connections where grade or alignment changes require offsets greater than those recommended by the pipe manufacturer.

Pipes and fittings shall be thoroughly cleaned before they are laid and shall be kept clean until they are accepted in the completed work.

All lines shall be closed off with bulkheads when pipe laying is not in progress.

Before being laid, all pipe and specials shall be thoroughly examined for defects, and no piece shall be installed which is known to be defective. If any defective piece should be discovered after having being installed, it shall be removed and replaced with a sound one in a satisfactory manner by the Contractor at his own expense.

Pipe shall be thoroughly cleaned before it is laid and shall be kept clean until it is accepted in the completed work. Special care shall be exercised to avoid leaving bits of wood, dirt, and other foreign particles in the pipe. If any such particles are discovered before the final acceptance of the work, they shall be removed and the pipe cleaned at the Contractor's expense.

Pipe laying for sewers shall begin at the low end of a run and proceed upgrade. Generally, all such pipe shall be laid with bells or grooves pointing uphill. Each pipe shall be carefully placed and checked for line and grade.

Adjustments to bring pipe to line and grade shall be made by scraping away or filling in granular material under the body of the pipe, but in no case by wedging or blocking up the barrel. The faces of the spigot ends and the bells shall be brought into fair contact, and the pipe shall be firmly and completely shoved home. As the work progresses, the interior of the pipelines shall be cleaned of all dirt and superfluous materials of every description. All lines shall be kept absolutely clean during construction. Pipelines shall be laid accurately to line and grade.

Gaskets for pipe joints shall be stored in a cool place and protected from light, sunlight, heat, oil, or grease until installed. Any gaskets showing signs of checking, weathering, or other deterioration will be rejected.

Pipe shall be of the types, sizes, and classes shown on the Plans or as listed in the Contract Items.

Each piece of pipe shall be inspected and cleaned before it is lowered in the trench and any lumps or projections on the face of the spigot or tongue end or the shoulder shall be cut away. No cracked, broken, or defective pieces shall be used in the work.

Concrete pipe manufactured with a plastic sheet liner shall be laid so that the liner is on the crown of the pipe and placed symmetrically about the vertical centerline of the pipe.

Pipe laying will be permitted only in dry trenches having a stable bottom. Where groundwater is encountered, the Contractor shall make every effort to secure an absolutely dry trench bottom.

If, in the opinion of the Engineer, the Contractor has failed to obtain an absolutely dry trench bottom by improper or insufficient use of all known methods of trench dewatering, the Engineer may then order the Contractor to excavate below grade and place sufficient selected fill material, crushed stone, or Class D concrete over the trench bottom at the Contractor's own expense.

If all efforts fail to obtain this condition and the Engineer determines that the trench bottom is unsuitable for pipe foundation, he will order in writing the kind of stabilization to be constructed.

#### W-15.02 Transportation and Delivery

Every precaution shall be taken to prevent injury to the pipe during transportation and delivery to the site. Extreme care must be taken in loading and unloading the pipe and fittings. Such work must be done slowly with skids or suitable power equipment, and the pipe shall be under perfect control at all times. Under no condition shall the pipe be dropped, bumped, dragged, pushed, or moved in any way which will cause damage to the pipe or coating. When handling the pipe with a crane, a suitable pipe hook or sling around the pipe shall be used. Under no condition shall the sling be allowed to pass through the pipe unless adequate measures are taken to prevent damage to the pipe ends.

If in the process of transportation, handling, or laying, any pipe or special is damaged, such pipe or pipes shall be replaced or repaired by the Contractor at his own expense.

The Contractor shall furnish and install suitable blocking and stakes so as to prevent the pipe from rolling. The type of blocking and stakes, and the method of installation, shall be approved by the Engineer.

#### W-15.03 Pipe Laying - Trenches

Pipelines shall be laid in trench excavation on bedding material as specified under the Workmanship and Materials section headed "Backfilling," Class D concrete cradle or other foundations as shown on the Plans, specified, or ordered in writing by the Engineer. The pipe shall be properly secured against movement and pipe joints shall be made in the excavation as required.

The pipe bedding shall be carefully graded, compacted, and formed to fit the bottom quadrant of the pipe. Bell holes shall be cut out for each joint as required to permit the joint to be properly made and allow the barrel of the pipe to have full bearing throughout its length.

Where pipelines are laid in Class D concrete cradle or encasement, the installation shall conform to the requirements of the Workmanship and Materials section headed "Pipe Cradles and Encasements."

Pipelines laid on other type foundations shall be installed as specified for such other foundations or as directed in writing by the Engineer.

#### W-15.04 Lateral Detection Tape

Detectable underground marking tape shall be installed over all laterals from the edge of pavement to the property line. The tape shall be Lineguard encased aluminum foil, or equal. The 2-inch wide tape shall be APWA green and reverse printed bearing the identification of the sewer line below it and a warning such as "CAUTION."

The tape shall be buried 4-6 inches. After trench backfilling, the tape shall be placed in the backfill and allowed to settle into place with the backfill.

#### W-15.05 Mechanical Joints for Ductile Iron Pipe

In making up mechanical joints, the spigot shall be centered in the bell. The surface with which the rubber gasket comes in contact shall be cleaned thoroughly and the gasket shall be washed thoroughly with soapy water just prior to assembly of the joint. The gasket and gland shall be placed in position, the bolts inserted, and the nuts tightened fingertight. The nuts then shall be tightened by means of a torque wrench in such a manner that the gland shall be brought up evenly into the joint. The following range of bolt torques shall be applied:

<u>Bolt Size</u> <u>Inches</u>	<u>Range of Torque</u> <u>Foot-Pounds</u>
5/8	45 - 60
3/4	75 - 90
1	80 - 100
1-1/4	105 - 120

If effective sealing is not obtained at the maximum torque listed above, the joint shall be disassembled and reassembled after a thorough cleaning.

All bolts and nuts shall be field coated with a bituminous coating after assembly of the joint.

#### W-15.06 Push-on Joints for Ductile Iron Pipe

In making up push-on joints, the gasket seat in the socket shall be cleaned thoroughly and the rubber gasket shall be wiped clean with a cloth. The gasket shall be placed in the socket and a thin film of lubricant shall then be applied to the inside surface of the gasket that will come in

contact with the entering pipe. The plain end of the pipe to be entered shall be cleaned thoroughly and placed in alignment with the bell of the pipe to which it is to be joined. The joint shall be made up by exerting sufficient force on the entering pipe so that its plain end is moved past the gasket until it makes contact with the base of the socket.

#### W-15.07 Joining Clay Pipe

The joining of clay pipe with flexible plastic joints shall be done in accordance with the manufacturer's instructions. The joint surface on both the bell and spigot ends shall be wiped clean and coated with a lubricant furnished by the manufacturer to facilitate assembly. The spigot end shall be inserted in the bell and pressure applied sufficient to seat the pipe properly. After the joint has been completed, any voids in the excavation beneath the spigot shall be thoroughly tamped full of granular fill material to provide a full bearing for the pipe and prevent excessive pressure on the bottom of the joint.

#### W-15.08 Joining of PVC Pipe-Gravity

The assembly of gasketed joints shall be performed as recommended by the pipe manufacturer. In all cases clean the gasket and bell, especially the groove area and the spigot area, with a rag, brush or paper towel to remove any dirt or foreign material before the assembly. Lubricant shall be applied as specified by the pipe manufacturer.

Align the spigot to the bell and insert the spigot into the bell until it contacts the gasket uniformly. Apply firm steady pressure either by hand or by bar and block assembly until the spigot easily slips through the gasket.

If undue resistance to insertion of the pipe end is encountered or the reference mark does not position properly, disassemble the joint and check the position of the gasket. If it is twisted or pushed out of its seat ("rolled"), inspect components, repair or replace damaged items, clean the components, and repeat the assembly steps. Be sure both pipe lengths are in concentric alignment. If the gasket was not out of position, verify proper location of the reference mark.

To join field-cut pipe, first square cut the pipe end. Use a factory-finished beveled end as a guide for proper bevel angle and depth of bevel plus the distance to the insertion reference mark. Bevel the end using a pipe beveling tool or a wood rasp which will cut the correct taper. Round off any sharp edges on the leading edge of the bevel.

#### W-15.09 Joining Concrete Pipe

Before joining concrete pipe using flexible rubber gaskets, the joint surfaces of both the bell and spigot (tongue and groove) ends shall be wiped clean. Any lumps, projections, burrs, or chips which would interfere with the proper compression of the gasket shall be repaired. The spigot or tongue end with the gasket in place and with all surfaces lubricated as recommended by the manufacturer, shall be inserted into the bell or groove. Pressure shall be applied to seat the pipe properly in the bell or groove. Voids under the pipe shall be tamped full of granular material to provide full bearing for the pipe.

Curves for reinforced concrete pipe sewers shall be constructed with standard pipe where the opening of the joint on the outside of the curve is less than 1/2 inch. Where greater opening of



the joint would be required, the curves shall be constructed using beveled or radius pipe with standard joints.

Curves for reinforced concrete pressure pipe or prestressed concrete pipe shall be constructed with standard pipe sections, where the opening of the joint on the outside of the curve is less than 1/2 inch, or with beveled pipe, precast elbows or combination of these methods.

#### W-15.10 Concrete Pipe Rubber Gasket Joints

Rubber gaskets shall be of the O-ring type or equivalent cross section approved by the Engineer. The composition and properties of the gaskets for gravity flow sewers shall meet the requirements of ASTM Des: C 443.

Composition and properties for concrete pressure pipe gaskets shall meet the requirements of the specifications for the concrete pressure pipe with which the gasket will be used.

In making O-ring rubber gasketed joints, the gasket and the pipe socket shall be lubricated with an approved rubber gasket lubricant, and the gasket shall be stretched over the spigot and placed accurately in position. The tongue or spigot end shall be carefully centered in the socket of the preceding pipe so as to avoid displacement of the gasket, and the pipe shall be drawn home fully compressing the gasket. Adjustments to line and grade shall be made in such a manner that the compressed rubber gasket will not be disturbed. Before proceeding with backfilling, the joint shall be felt completely around to determine whether the gasket is in its proper position. If the gasket can be felt out of place, the pipe shall be withdrawn and the gasket examined for cuts or breaks. If the gasket has been damaged, it shall be replaced with a new one before the pipe is replaced.

Rubber gaskets shall be stored in a cool place and protected from light, sunlight, heat, oil, or grease until installed. Any gaskets showing signs of checking, weathering, or other deterioration will be rejected.

#### W-15.11 Temporary Bulkheads

At the ends of contract sections, where adjoining pipelines have not been completed, and in connections built into pipelines where adjoining pipelines or structures have not been completed and are not ready to be connected, temporary bulkheads, approved by the Engineer, shall be built. Such bulkheads encountered in connecting sewers or structures included in the Contract, or pipelines or structures previously built, shall be removed by the Contractor when the need for them has passed or when ordered by the Engineer.

#### W-15.12 Testing

The testing of pipelines shall be done in accordance with the requirements of the Workmanship and Materials section headed "Leakage Tests."

#### W-15.13 Joining Different Types (Clay, PVC, or Ductile Iron) of Pipe

The joining of clay pipe to ductile iron pipe or clay pipe to PVC pipe, shall be accomplished with flexible compression couplings. Couplings shall include stainless steel shear rings and stainless steel compression bands. Such couplings shall meet the requirements of ASTM DES: C

425, ASTM C1173 and shall be Series No. 1002 flexible polyvinyl chloride couplings with stainless steel compression bands and shear rings as manufactured by Fernco Joint Sealer Co., Ferndale, Michigan; Band-Seal couplings as manufactured by Mission Clay Products Corp., Whittier, California; or approved equal. After the joint has been completed, any voids in the excavation beneath the coupling shall be thoroughly tamped full of granular fill material to provide a full bearing for the pipe and prevent excessive pressure on the bottom of the joint.

The joining of SDR-35 or SDR-26 PVC pipe to ductile iron or C-900 PVC pipe, shall be accomplished with rigid PVC C900 x SDR-35 adapter couplings. Such couplings shall be molded of PVC material meeting ASTM D-1784 specifications. Joints shall meet ASTM D-3213 requirements with gaskets conforming to ASTM F-477. The adapter couplings shall be manufactured by Harco, Lynchburg, VA, or equal. Installation of rigid couplings shall be done in accordance with the manufacturer's instructions. After the joint has been completed, any voids in the excavation beneath the coupling shall be thoroughly tamped full of granular fill material to provide a full bearing for the pipe and prevent excessive pressure on the bottom of the joint.

#### W-15.14 Connection to Manholes

The Contractor will be required to submit a shop drawing, detailing the method of connecting the proposed pipe to the manhole and making it watertight:

1. For connecting vitrified clay or ductile iron pipe, the Contractor shall use nonshrink grout to seal the opening between the pipe O.D. and manufactured opening in the manhole or flexible rubber boot, precast into the manhole. The boot shall have stainless steel bands to compress and seal to the proposed pipe or shall be a compression type, such as A-Lock.
2. For connecting PVC pipe, the Contractor shall use a flexible rubber boot, precast into the manhole. The boot shall have stainless steel bands to compress and seal to the proposed pipe or shall be a compression type, such as A-Lock. Should the flexible rubber boot need to be relocated or when connecting to an existing manhole, the Contractor shall perform the connection by one of two methods. The preferred method is to core the manhole and install a rubber boot. The rubber boot shall be manufactured by Kor-n-Seal, or equal. The boot shall be installed and the PVC connection shall be in accordance with the manufacturer's instructions. If the manhole cannot be cored or if the manhole is constructed of brick, the connection shall be made with a PVC manhole adapter which has an exterior impregnated silica surface layer. The adapter shall be manufactured by GPK Products, Inc., Fargo, ND, or equal. The adapter shall be installed and grouted into the manhole wall in accordance with the manufacturer's instructions with nonshrink grout. The PVC shall be inserted through the adapter.

#### W-15.15 Joint Grouting

Joints for concrete pipelines using rubber gaskets and steel end rings shall be grouted on the outside with cement mortar composed of one part Type IA portland cement to one part sand by volume. The materials shall be thoroughly mixed to produce a uniform mortar with all aggregate particles well coated.

The joint grouting shall not advance closer than two pipe lengths to the laying operations. In grouting the joint, a cloth diaper shall be used to encase the outside diameter of the bell of the pipe and adequately straddle the joint recess so as to keep out dirt and to serve as a form for grouting. The joint space shall be filled with cement mortar, just thin enough to run around the joint. The diaper is to be left in place permanently. Before the mortar has taken its initial set, the diaper shall be examined, and if not completely filled, additional mortar shall be forced into the joint.

\* \* \*

## SECTION 24 - PVC PIPE - FORCE MAIN

### W-24.01 General

All pipe and fittings, 4"-48" nominal diameter, shall be solid wall polyvinyl chloride (PVC) pipe manufactured to standards as outlined in the following sections.

Only 1 pipe manufacturer will be allowed for the entire project.

### W-24.02 Pipe standards

For PVC force mains, 4" through 12", the pipe shall be AWWA C900, DR-18 (class 150). For PVC force mains 14" through 48", the pipe shall conform to AWWA C905, DR-25. The outside diameter dimensions shall be identical to ductile iron pipe dimensions. The pipe shall have integral bell push on type joints conforming to ASTM D3139. Bell ends shall be equipped with elastomeric gaskets meeting the requirements of ASTM F477. The color shall be green and the nominal laying length per pipe section shall be 20 ft.

### W-24.03 Pre-Installation Tests, Reports, Markings and Submittals

All pipe and fittings shall be marked per Section 2.6 "Marking Requirements" of AWWA C900.

**PRIOR TO SHIPMENT** of the pipe and fittings to the project site, the Contractor shall submit to the Engineer test reports and certifications as described below, duly certified by the manufacturer's testing facility or an independent certified testing laboratory demonstrating full compliance with AWWA C900 or C905. Certification from the supplier is not acceptable.

An original, plus four (4) copies of the following, shall be submitted to the Engineer.

1. The name, address, and phone number of the pipe and fittings manufacturer and the location of the plant at which they will be manufactured.
2. **CERTIFICATION AND CERTIFIED TEST REPORTS** that each **LOT** of pipe and fittings has been manufactured, sampled, and tested per AWWA C900 or C-905. The City shall be provided in writing with the means to cross-reference the markings with the certification and test reports (i.e. date of manufacturer, lot number and shift number etc.). If this information is marked on the pipe in a code, the markings shall be decoded in writing.

### W-24.04 Bedding Requirements

Unless otherwise indicated on the Plans, the PVCP force main shall be installed with Class "C" bedding as shown on the plans. If suitable fill material is not excavated at the project site, it shall be imported. Compaction requirements are described in

subsection W-24.12 "Bedding Placement for Pipelines". In no cases shall a concrete cradle be used. In the event the Contractor opts to install crushed stone, it shall be **NO GREATER THAN A #57 STONE**.

#### W-24.05 Fittings

Both PVC and ductile iron fittings are acceptable unless the plans specifically call for PVC fittings. For standard angles, in sizes 4" through 8", fittings shall be injection molded in accordance with AWWA C907 and CSA B137.2. For larger sizes (10" and greater) and for non-standard angles, fittings shall conform to the requirements of CSA B137.3 and shall be fabricated in a factory from AWWA C900/905 pipe.

Injection molded fittings shall have a dimensional ratio of 18 (DR18) and fabricated fittings shall have a dimensional ratio equal to that of the pipe they are being installed on. All injection molded fittings shall conform to AWWA C907, CSA B137.2 and fabricated fittings shall conform to CSA B137.3

All PVC fittings shall incorporate integral elastomeric gasket bell joints push on type.

Materials used in the manufacture of PVC fittings shall equal or exceed cell class 12454 (ASTM 1784) with a hydrostatic design basis of 27.58 Mpa at 23°C as outlined in AWWA C900 and C905, and CSA B137.3.

Fabricated fittings shall be manufactured from segments of PVC pipe to the requirements of AWWA C900 and C905, and CSA B137.3. Segments shall be bonded together and over wrapped with fiberglass-reinforced polyester. All bends, up to and including 45°, shall be constructed from a single section of PVC pipe, without joints, bonding or fiberglass-reinforced polyester wrapping.

The pressure rating of the fittings shall be equal to the pressure rating of the pipe they are being installed on.

The manufacturer shall meet all the qualification test requirements as outlined in CSA B137.3

All fittings shall be marked with the following identifications:

- Nominal size, CIOD
- Manufacturers name or trademark
- AWWA pressure rating/pressure class and standard number to which the fitting is made
- CSA Standard number
- Proper handling label

#### W-24.06 Harnessing

Joint restraint devices for all pipes and fittings shall meet requirements as specified under the "RESTRAINING DEVICES" specification. Thrust blocks shall not be allowed.

All wedge devices assemblies and related parts shall be processed through a

phosphate wash, rinse and drying operation prior to coating application. The coating shall consist of a minimum of two coats of liquid Xylan fluoropolymer coating with heat cure to follow each coat.

All casting bodies shall be surface pretreated with a phosphate wash, rinse and sealer before drying. The coating shall be electrostatically applied and heat cured. The coating shall be a polyester based powder to provide corrosion, impact and UV resistance.

The coating system shall be Mega-Bond as manufactured by EBAA Iron, Inc., Eastland, Texas, or approved equal.

#### W-24.07 Marking and Locating

Two strands of #12 gauge green insulated copper tracing wires shall be attached to the pipe with duct tape at regular intervals in the 10 and 2 o' clock position. The wires shall be looped around each bell. See Section W-13 "Directional Drilling HDPE Pipe" requirements for directional drilled pipe. Wire insulation must be suitable for buried service such as HDPE or HMWPE. Nylon insulation is not acceptable. Wires must be spliced together with wire connectors suitable for buried service such as DBR Kit by 3M, Snakebite by Copperhead Industries or equal. Twisting wires together and sealing with electrical tape is not acceptable. No payment will be made for pipe that does not pass a continuity test through the wires after installation. See standard details for additional requirements.

The locating wire shall terminate at the top of each valve box, air release valve box and manhole and must be capable of extending 24" above the top of the box (or manhole) in such a manner so as not to interfere with the valve operation.

#### W-24.08 Installation

Installation of PVCP force mains shall comply with the requirements of AWWA Standard C605 "Underground Installation Of Polyvinyl Chloride (PVC) Pressure Pipe and Fittings For Water".

Pipe bending shall not be allowed.

Joint deflections up to a maximum of 1 degree will be permitted at integral bell and spigot joints. Deflections larger than 3 degrees may be accomplished with factory molded or fabricated standard angle fittings; or, a standard deflection shall be accomplished with a factory fabricated fitting of the proper angle. Refer to Section W-24.05.

Air release valves shall use service saddles to attach the corporation stop connection to the PVC pipe. The service saddle body shall be sized exactly to the outside diameter of the pipe, with double straps anchored with a minimum of a four bolt pattern. The service saddle body shall be ductile iron, the sealing gasket shall be BUNA-N rubber and the straps shall be corrosion resistant alloy steel.

#### W-24.09 Testing

Testing of PVCP force mains shall comply with the requirements of AWWA Standard C605 "Underground Installation Of Polyvinyl Chloride (PVC) Pressure Pipe And Fittings For Water" Section 7 (less references to disinfecting). The hydrostatic and leakage testing may be performed simultaneously. The average hydrostatic test pressure shall be 100 psi.

Air pressure testing of installed pressure pipe is expressly prohibited due to the catastrophic nature of failure should failure occur.

#### W-24.10 Storage of PVC Pipe

Pipe shall be stored at the job site in unit packages provided by the manufacturer. Caution shall be exercised to avoid compression, damage, or deformation to bell ends of the pipe. When unit packages of PVC pipe are stacked, the Contractor ensure that the weight of upper units does not cause deformation to pipe in lower units.

PVC pipe unit packages shall be supported by racks or dunnage to prevent damage to the bottom during storage. Supports shall be spaced to prevent pipe bending.

PVC pipe shall not be stored close to heat sources or hot objects such as heaters, boilers, steam line, engine exhaust, etc.

When unit packages of PVC pipe are stacked, ensure that the height of the stack does not result in instability which could cause stack collapse, pipe damage, bodily injury, and property damage.

The interior as well as all sealing surfaces of pipe, fittings, and other accessories shall be kept free from dirt and foreign matter.

Gaskets shall be protected from excessive exposure to heat, direct sunlight, ozone, oil and grease.

#### W-24.11 Handling of PVC Pipe - Standard Procedures

When using fork lifts or other handling equipment, prevent damage to PVC pipe.

When handling PVC pipe, avoid severe impact blows, abrasion damage and gouging or cutting by metal surfaces or rocks. Avoid stressing bell joints and damage of bevel ends.

Pipe shall be lowered, not dropped, from trucks and into trenches.

In preparation for pipe installation, placement (stringing) of pipe shall be as close to the trench as practical and on the opposite side from excavated earth. Bell ends shall point in the direction of work progress.

The Engineer may reject any pipe that shows visible signs of damage resulting from poor storage and handling practices.

#### W-24.12 Bedding Placement for Pipelines

Select fill material, used as pipe bedding, shall be placed by hand, in uniform layers not greater than 6 inches in loose thickness and thoroughly compacted in place. Select fill material pipe bedding shall extend to one foot over the top of the pipe.

Each layer of select fill shall be thoroughly tamped and compacted in place by hand or with suitable mechanical or pneumatic tools to a dry density not less than 95 percent of the maximum dry density as determined by AASHTO Des: T-180. No stone larger than 4 inches in diameter shall be placed closer than two feet to any point on any pipe.

#### W-24.13 Trench Backfill

Trench backfilling work shall be done in a manner to prevent dropping of material directly on top of any conduit or pipe from a vertical distance greater than 5 feet. In no case shall backfilling material from a bucket be allowed to fall directly on a structure or pipe and in all cases, the bucket shall be lowered so that the shock of falling earth will not cause damage.

Lumps shall be broken up and if there are any stones, pieces of crushed rock or lumps which cannot be readily broken up, they shall be distributed throughout the mass so that all interstices are solidly filled with fine material.

#### W-24.14 Backfill for Short Tunnel

Where pipelines are placed in short tunnels, the annular space between the outside of the pipe wall and the tunnel wall shall be completely filled with select fill material or suitable excavated material. Pipelines in short tunnels shall be suitably supported, to permit placing backfill which shall be suitably tamped in place.

#### W-24.15 Inspection and Testing of Backfilling

All backfill shall be subject to test by the Engineer.

\* \* \*



## SECTION 73—RESTRAINING DEVICES

### W-73.01 General

Restraint devices for mechanical joint fittings and appurtenances conforming to either ANSI/AWWA C111/A21.11 or ANSI/AWWA C153/A21.53, shall conform to the following:

Restraint devices for nominal pipe sizes 3 inch through 36 inch shall consist of multiple gripping wedges incorporated into a follower gland meeting the applicable requirements of ANSI/AWWA C110/A21.10.

The devices shall have a working pressure rating equal to that of the pipe on which it is used but a minimum 100 psi. Ratings are for water pressure and must include a minimum safety factor of 2:1 in all sizes.

### W-73.02 Material

Gland body, wedges and wedge actuating components shall be cast from grade 65-45-12 ductile iron material in accordance with ASTM A536.

Ductile iron gripping wedges shall be heat treated within a range of 370 to 470 BHN.

Three (3) test bars shall be incrementally poured per production shift as per Underwriter's Laboratory (U.L.) specifications and ASTM A536. Testing for tensile, yield and elongation shall be done in accordance with ASTM E8.

Chemical and nodularity tests shall be performed as recommended by the Ductile Iron Society, on a per ladle basis.

### W-73.03 Gaskets

Mechanical joint gasket shall be of a design that causes the gasket to deflect approximately 30% during assembly of the mechanical joint. The gasket material shall conform to the requirements of ANSI/AWWA C111/A21.11, section 11-6.4, of the latest revision.

### W-73.04 Traceability

An identification number consisting of year, day, plant and shift (YYDDD) (plant designation) (Shift number), shall be cast into each gland body.

All physical and chemical test results shall be recorded such that they can be accessed via the identification number on the casting. These Material Traceability Records (MTR's) are to be made available, in hard copy, to the purchaser that requests such documentation and submits his gland body identification number.

Production pieces that are too small to accommodate individual numbering, such as fasteners and wedges, shall be controlled in segregate inventory until such time as all quality control tests are passed. These component parts may then be released to a general inventory for final assembly and packaging.

#### W-73.05 Installation

Mechanical joint restraint shall require conventional tools and installation procedures per AWWA C600, while retaining full mechanical joint deflection during assembly.

Proper actuation of the gripping wedges shall be ensured with torque limiting twist off nuts.

#### W-73.06 Approvals

Mechanical Joint Restraints shall be listed by Underwriters Laboratories in the 4 inch through 12 inch sizes.

Mechanical Joint Restraints shall be Factory Mutual Approved in the 4 inch through 12 inch sizes.

Mechanical Joint Restraints, 4 inch through 24 inch, shall meet or exceed the requirements of ASTM F1674 of the latest revision.

Mechanical joint restraint shall be Series 2000PV for PVC pipe and Series 1000 for DIP pipe produced by EBAA Iron Inc. or approved equal.

#### W-73.07 Coating System

Coating for restraint devices shall consist of the following:

All wedge assemblies and related parts shall be processed through a phosphate wash, rinse and drying operation prior to coating application. The coating shall consist of a minimum of two coats of liquid Xylan® fluoropolymer coating with heat cure to follow each coat.

All casting bodies shall be surface pretreated with a phosphate wash, rinse and sealer before drying. The coating shall be electrostatically applied and heat cured. The coating shall be a polyester based powder to provide corrosion, impact and UV resistance.

The coating system shall be MEGA-BOND by EBAA Iron, Inc. or approved equal. Requests for approved equal must submit coating material and process details for review.

\*\*\*

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## CONSTRUCTION AGREEMENT

This Construction Agreement ("Agreement") is made as of February 21, 2020, by and between CSX TRANSPORTATION, INC., a Virginia corporation with its principal place of business in Jacksonville, Florida ("CSXT"), City of Tampa, a body corporate and political subdivision of the State of Florida ("City") and Hillsborough County, a body corporate and political subdivision of the State of Florida ("County").

## EXPLANATORY STATEMENT

1. City has proposed to construct, or to cause to be constructed, CR-587/Armenia Ave. roadway widening, new 106.5' TUB surface installation, new flashing lights and gates, and Flagging and CEI during construction of the widened roadway at CSX milepost SY-851.32, DOT 626889A, Florida Zone, Clearwater Subdivision, in Tampa, Hillsborough County, FL (the "Project").
2. City has obtained, or will obtain, all authorizations, permits and approvals from all local, state and federal agencies (including City), and their respective governing bodies and regulatory agencies, necessary to proceed with the Project and to appropriate all funds necessary to construct the Project.
3. City acknowledges that: (i) by entering into this Agreement, CSXT will provide services and accommodations to promote public interest in this Project, without profit or other economic inducement typical of other City contractors; (ii) neither CSXT nor its affiliates (including their respective directors, officers, employees or agents) will incur any costs, expenses, losses or liabilities in excess of payments made to CSXT, by or on behalf of City or its contractors, pursuant to this Agreement; and (iii) CSXT retains the paramount right to regulate all activities affecting its property and operations.
4. It is the purpose of this Agreement to provide for the terms and conditions upon which the Project may proceed.

NOW, THEREFORE, in consideration of the foregoing Explanatory Statement and other good and valuable consideration, the receipt and sufficiency of which are acknowledged by the parties, the parties agree as follows:

### 1. Project Plans and Specifications

- 1.1 Preparation and Approval. Pursuant to Exhibit A of this Agreement, all plans, specifications, drawings and other documents necessary or appropriate to the design and construction of the Project shall be prepared, at City's sole cost and expense, by City or CSXT or their respective contractors. Project plans, specifications and drawings

prepared by or on behalf of City shall be subject, at CSXT's election, to the review and approval of CSXT. Such plans, specifications and drawings, as prepared or approved by CSXT, are referred to as the "Plans", and shall be incorporated and deemed a part of this Agreement. Plans prepared or submitted to and approved by CSXT as of the date of this Agreement are set forth in Exhibit B to this Agreement.

1.2 Effect of CSXT Approval or Preparation of Plans. By its review, approval or preparation of Plans pursuant to this Agreement, CSXT signifies only that such Plans and improvements constructed in accordance with such Plans satisfy CSXT's requirements. CSXT expressly disclaims all other representations and warranties in connection with the Plans, including, but not limited to, the integrity, suitability or fitness for the purposes of City or any other persons of the Plans or improvements constructed in accordance with the Plans.

1.3 Compliance with Plans. The Project shall be constructed in accordance with the Plans.

2. Allocation and Conduct of Work

Work in connection with the Project shall be allocated and conducted as follows:

2.1 CSXT Work. Subject to timely payment of Reimbursable Expenses as provided by Section 4, CSXT shall provide, or cause to be provided, the services as set forth by Exhibit A to this Agreement. City agrees that CSXT shall provide all services that CSXT deems necessary or appropriate (whether or not specified by Exhibit A) to preserve and maintain its property and operations, without impairment or exposure to liability of any kind and in compliance with all applicable federal, state and local regulations and CSXT's contractual obligations, including, but not limited to, CSXT's existing or proposed third party agreements and collective bargaining agreements.

2.2 City Work. City shall perform, or cause to be performed, all work as set forth by Exhibit A, at City's sole cost and expense.

2.3 Conduct of Work. CSXT shall commence its work under this Agreement following: (i) delivery to CSXT of a notice to proceed from City; (ii) payment of Reimbursable Expenses (as provided by Section 4.1) as required by CSXT prior to the commencement of work by CSXT; (iii) issuance of all permits, approvals and authorizations necessary or appropriate for such work; and (iv) delivery of proof of insurance acceptable to CSXT, as required by Section 9. The initiation of any services by CSXT pursuant to this Agreement, including, but not limited to, the issuance of purchase orders or bids for materials or services, shall constitute commencement of work for the purposes of this Section. The parties intend that all work by CSXT or on CSXT property shall conclude no later than **December 31, 2020**, unless the parties mutually agree to extend such date.

3. **Special Provisions.** City shall observe and abide by, and shall require its contractors (“Contractors”) to observe and abide by the terms, conditions and provisions set forth in Exhibit C to this Agreement (the “Special Provisions”). To the extent that City performs Project work itself, City shall be deemed a Contractor for purposes of this Agreement. City further agrees that, prior to the commencement of Project work by any third party Contractor, such Contractor shall execute and deliver to CSXT Schedule I to this Agreement to acknowledge Contractor’s agreement to observe and abide by the terms and conditions of this Agreement.
  
4. **Cost of Project and Reimbursement Procedures**
  - 4.1 **Reimbursable Expenses.** City shall reimburse CSXT for all costs and expenses incurred by CSXT in connection with the Project, including, without limitation: (1) all out of pocket expenses, (2) travel and lodging expenses, (3) telephone, facsimile, and mailing expenses, (4) costs for equipment, tools, materials and supplies, (5) sums paid to CSXT’s consultants and subcontractors, and (6) CSXT labor in connection with the Project, together with CSXT labor overhead percentages established by CSXT pursuant to applicable law (collectively, “Reimbursable Expenses”). Reimbursable Expenses shall also include expenses incurred by CSXT prior to the date of this Agreement to the extent identified by the Estimate provided pursuant to Section 4.2.
  
  - 4.2 **Estimate.** CSXT has estimated the total Reimbursable Expenses for the Project as shown on Exhibit D (the “Estimate”, as amended or revised). In the event CSXT anticipates that actual Reimbursable Expenses for the Project may exceed such Estimate, it shall provide City with the revised Estimate of the total Reimbursable Expenses, together with a revised Payment Schedule (as defined by Section 4.3.1), for City’s approval and confirmation that sufficient funds have been appropriated to cover the total Reimbursable Expenses of such revised Estimate. CSXT may elect, by delivery of notice to City, to immediately cease all further work on the Project, unless and until City provides such approval and confirmation. CSXT will use its best efforts to provide written notification to City when eighty (80) percent of the Estimate has been expended.
  
  - 4.3 **Payment Terms.**
    - 4.3.1 City shall pay CSXT for Reimbursable Expenses in the amounts and on the dates set forth in the Payment Schedule as shown on Exhibit E (the “Payment Schedule”, as revised pursuant to Section 4.2). CSXT agrees to submit invoices to City for such amounts and City shall remit payment to CSXT at the later of thirty (30) days following delivery of each such invoice to City or, the payment date (if any) set forth in the Payment Schedule.
  
    - 4.3.2 Following completion of the Project, CSXT shall submit to City a final invoice that reconciles the total Reimbursable Expenses incurred by CSXT against the total

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payments received from City. City shall pay to CSXT the amount by which Reimbursable Expenses exceed total payments as shown by the final invoice, within thirty (30) days following delivery of such invoice to City. In the event that the payments received by CSXT from City exceed the Reimbursable Expenses, CSXT shall remit such excess to City.

4.3.3 In the event that City fails to pay CSXT any sums due CSXT under this Agreement within the time period set forth herein: (i) City shall pay CSXT interest at the lesser of 1.0% per month or the maximum rate of interest permitted by applicable law on the delinquent amount until paid in full; and (ii) CSXT may elect, by delivery of notice to City: (A) to immediately cease all further work on the Project, unless and until City pays the entire delinquent sum, together with accrued interest; and/or (B) to terminate this Agreement.

4.3.4 All invoices from CSXT shall be delivered to City in accordance with Section 16 of this Agreement. All payments by City to CSXT shall be made by certified check and mailed to the following address or such other address as designated by CSXT's notice to City:

CSX Transportation, Inc.  
P.O. Box 530192  
Atlanta, GA 30353-0192

4.4 Effect of Termination. City's obligation to pay to CSXT Reimbursable Expenses in accordance with Section 4 shall survive termination of this Agreement for any reason.

5. Appropriations City represents to CSXT that: (i) City has appropriated funds sufficient to reimburse CSXT for the Reimbursable Expenses encompassed by the Estimate attached as Exhibit D; (ii) City shall use its best efforts to obtain appropriations necessary to cover Reimbursable Expenses encompassed by subsequent Estimates approved by City; and (iii) City shall promptly notify CSXT in the event that City is unable to obtain such appropriations.

6. Easements and Licenses

6.1 City Obligation. City shall acquire all necessary licenses, permits and easements required for the Project.

6.2 Temporary Construction Licenses. Insofar as it has the right to do so, CSXT hereby grants City a nonexclusive license to access and cross CSXT's property, to the extent necessary for the construction of the Project (excluding ingress or egress over public grade crossings), along such routes and upon such terms as may be defined and imposed by Railroad and as may be designated on the Plans approved by CSXT.

- 6.3 Temporary Construction Easements. CSX may grant without warranty to City if required temporary non-exclusive easement for access to the extent necessary for the project on terms and conditions, and at a price acceptable to the parties.
- 6.4 Permanent Easements. Insofar as it has the right to do so, CSXT shall grant, without warranty to City, easements for the use and maintenance of the Project wholly or partly on CSXT property as shown on the Plans approved by CSXT, if any, on terms and conditions and at a price acceptable to the parties. Upon request by CSXT, City shall furnish to CSXT descriptions and plat plans for the easements.
7. Permits. At its sole cost and expense, City shall procure all permits and approvals required by any federal, state, or local governments or governmental agencies for the construction, maintenance and use of the Project, copies of which shall be provided to CSXT.
8. Termination
- 8.1 By City. For any reason, City may, as its sole remedy, terminate this Agreement by delivery of notice to CSXT. City shall not be entitled to otherwise pursue claims for consequential, direct, indirect or incidental damages or lost profits as a consequence of CSXT's default or termination of this Agreement or Work on the Project by either party.
- 8.2 By CSXT. In addition to the other rights and remedies available to CSXT under this Agreement, CSXT may terminate this Agreement by delivery of notice to City in the event City or its Contractors fail to observe the terms or conditions of this Agreement and such failure continues more than ten (10) business days following delivery of notice of such failure by CSXT to City.
- 8.3 Consequences of Termination. If the Agreement is terminated by either party pursuant to this Section or any other provision of this Agreement, the parties understand that it may be impractical for them to immediately stop the Work. Accordingly, they agree that, in such instance a party may continue to perform Work until it has reached a point where it may reasonably and safely suspend the Work. City shall reimburse CSXT pursuant to this Agreement for the Work performed, plus all costs reasonably incurred by CSXT to discontinue the Work and protect the Work upon full suspension of the same, the cost of returning CSXT's property to its former condition, and all other costs of CSXT incurred as a result of the Project up to the time of full suspension of the Work. Termination of this Agreement or Work on the Project, for any reason, shall not diminish or reduce City's obligation to pay CSXT for Reimbursable Expenses incurred in accordance with this Agreement. In the event of the termination of this Agreement or the Work for any reason, CSXT's only remaining obligation to City shall be to refund to City payments made to CSXT in excess of Reimbursable Expenses in accordance with Section 4.

9. **Insurance.** In addition to the insurance that City requires of its Contractor, City shall acquire or require its Contractor to purchase and maintain insurance in compliance with CSXT's insurance requirements attached to this Agreement as **Exhibit F.** Neither City nor Contractor shall commence work on the Project until such policy or policies have been submitted to and approved by CSXT's Risk Management Department.

**10. Ownership and Maintenance.**

10.1 **By County.** County shall maintain and repair, at its sole cost and expense, all parts comprising the permanent aspects of the Project, as shown by the Plans, consisting of roadway pavement up to the outer ends of the railroad cross ties, sidewalks, guardrails, and curbs, in good and safe condition to CSXT's satisfaction. In the event County fails to do so after reasonable notice from CSXT (unless an emergency condition exists or is imminent in the opinion of CSXT that requires immediate action), CSXT may perform such maintenance and repair, at County's sole cost and expense.

10.2 **By CSXT.** CSXT shall maintain and repair the crossing surface between the ends of its cross ties and its signal facilities at the crossing, at County's sole cost and expense.

10.3 **Alterations.** County shall not undertake any alteration, modification or expansion of the Project, without the prior written approval of CSXT, which may be withheld for any reason, and the execution of such agreements as CSXT may require. CSXT may undertake alterations of its property, track or facilities and shall be reimbursed by County for the expenses incurred by CSXT with respect to the removal and restoration of the crossing in connections with such alteration.

**11. Indemnification**

11.1 To the extent permitted by Florida State Law at 768.28 F.S., City hereby assumes, and shall at all times hereafter defend, indemnify, and save Railroad harmless from and against any and all liability, loss, claim, suit, damage, charge or expense (collectively "Losses") on account of:

(a) Death of or injury to any persons (including officers, agents, employees or invitees of Railroad or City); or

(b) City shall not indemnify, defend, or hold harmless CSXT or its affiliates for any environmental damages or related remediation caused by pre-existing conditions on CSXT's property.

(c) Loss or destruction of any property (including claims for business or service interruptions and costs and expenses associated therewith, but excluding "City's Property"); arising out of or resulting from or in any way connected with



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construction, maintenance, relocation, repair, renewal, alteration, change, operation or use of any Crossing, or any structures in connection therewith, or the removal of same from Right-of-Way of Railroad, or restoration of Right-of-Way of Railroad, except when caused solely by the willful misconduct or gross negligence of Railroad.

- 11.2 Notwithstanding section 11.1 above, use of Railroad's Right-of-Way and Railroad's adjacent operations involve risks of loss and damage. To the extent permitted by Florida State Law at 768.28 F.S., City hereby expressly assumes all risk of loss and damage to City's Facilities resulting or arising from railroad operations (including electrical field creation, electromagnetic induction, fire or derailment), regardless of any fault or negligence of Railroad. For purposes of this paragraph, the term "City's Facilities" shall also include the contents of any Pipeline and all property of others situated or placed upon any Crossing or adjacent Railroad property by City or by such third party at City's request or for the sole benefit of City.
- 11.3 Notwithstanding section 11.1, and in furtherance of Section 28.2 (CSX General Crossing Agreement between City of Tampa and CSXT dated March 1, 2006), to the extent permitted by Florida State Law at 768.28 F.S., City assumes risk of challenge to Railroad title at any Crossing solely because of City's occupation, and agrees that, in the event of any suit or claims by any third party claiming additional compensation for City's occupation of any Crossing, City will either (a) assume the defense of such suit (or file condemnation counterclaim) and pay such compensation claim, or (b) remove the subject Crossing within thirty (30) days of notice of such claim or suit.
12. Independent Contractor. The parties agree that neither City nor its Contractors shall be deemed either agents or independent contractors of CSXT. Except as otherwise provided by this Agreement, CSXT shall exercise no control whatsoever over the employment, discharge, compensation of, or services rendered by City or City's Contractors, or the construction practices, procedures, and professional judgment employed by City or its Contractor to complete the Project. Notwithstanding the foregoing, this Section 12 shall in no way affect the absolute authority of CSXT to prohibit City or its Contractors or anyone from entering CSXT's property, or to require the removal of any person from its property, if it determines, in its sole discretion, that such person is not acting in a safe manner or that actual or potential hazards in, on or about the Project exist.
13. "Entire Agreement" This Agreement embodies the entire understanding of the parties, may not be waived or modified except in a writing signed by authorized representatives of both parties, and supersedes all prior or contemporaneous written or oral understandings, agreements or negotiations regarding its subject matter. In the event of any inconsistency between this Agreement and the Exhibits, the more specific terms of the Exhibits shall be deemed controlling.

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14. **Waiver.** If either party fails to enforce its respective rights under this Agreement, or fails to insist upon the performance of the other party's obligations hereunder, such failure shall not be construed as a permanent waiver of any rights or obligations in this Agreement.
15. **Assignment.** CSXT may assign this Agreement and all rights and obligations herein to a successor in interest, parent company, affiliate, or future affiliate. Upon assignment of this Agreement by CSXT and the assumption of CSXT's assignee of CSXT's obligations under this Agreement, CSXT shall have no further obligation under this Agreement. City shall not assign its rights or obligations under this Agreement without CSXT's prior consent, which consent shall not be unreasonably withheld.
16. **Notices.** All notices, consents and approvals required or permitted by this Agreement shall be in writing and shall be deemed delivered upon personal delivery, upon the expiration of three (3) days following mailing by first class U.S. mail, or upon the next business day following mailing by a nationally recognized overnight carrier, to the parties at the addresses set forth below, or such other addresses as either party may designate by delivery of prior notice to the other party:

If to CSXT: CSX Transportation, Inc.  
500 Water Street, J-301  
Jacksonville, Florida 32202  
Attention: Director Project Management – Public Projects

If to City: City of Tampa  
306 E. Jackson Street  
Tampa, FL 33602  
Attn: Jean W. Duncan, PE  
Director of Transportation and Stormwater Services Dept.

If to County: Hillsborough County  
PO Box 1110, 22<sup>nd</sup> Floor County Center  
Tampa, FL 33601  
Attn: Sharbel Riveron, E.I.- Public Works

17. **Severability.** The parties agree that if any part, term or provision of this Agreement is held to be illegal, unenforceable or in conflict with any applicable federal, state, or local law or regulation, such part, term or provision shall be severable, with the remainder of the Agreement remaining valid and enforceable.
18. **Applicable Law.** This Agreement shall be governed by the laws of the State of Florida, exclusive of its choice of law rules. The parties further agree that the venue of all legal and equitable proceedings related to disputes under this Agreement shall be situated in Duval

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County, Florida, and the parties agree to submit to the personal jurisdiction of any State or Federal court situated in Duval County, Florida.

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IN WITNESS WHEREOF, the parties have caused this Agreement to be executed in duplicate, each by its duly authorized officers, as of the date of this Agreement.

CITY OF TAMPA

By: Jane Castor

Name: Jane Castor

Title: Mayor

APPROVED AS TO FORM:

[Signature]  
Assistant City Attorney

ATTEST:



Shirley Fox-Knowles  
City Clerk/Deputy City Clerk

ATTEST: PAT FRANK, CLERK

Pat Frank  
Deputy Clerk  
APPROVED BY THE COUNTY ATTORNEY

BY Marc Taylor  
Approved As To Form And Legal Sufficiency.

HILLSBOROUGH COUNTY

By: [Signature]

Name: Lesley "Les" Miller, Jr.

Title: Chairman

Date: 2/5/2020

CSX TRANSPORTATION, INC.

By: [Signature]

J. Tod Echler

Chief Engineer – Design & Construction

BOARD OF COUNTY COMMISSIONERS  
HILLSBOROUGH COUNTY FLORIDA  
DOCUMENT NO. 20-0129

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**EXHIBIT A  
ALLOCATION OF WORK**

Subject to Section 2.1, work to be performed in connection with the Project is allocated as follows:

- A. City shall let by contract to its Contractors:
  - 1. Sidewalk, curb, median, and gutter installation.
  - 2. Road work up to crossing surface.
  - 3. Pavement markings over and across the railroad tracks.
  - 4. MOT and Police Protection for the road closure during the railroad crossing rebuild.
  
- B. CSXT shall perform or cause to be performed:
  - 1. Crossing surface replacement and placement of a temporary pavement wedge.
  - 2. Cleanup and removal of material/debris from crossing rebuild.
  - 3. Changes in communication and signal lines.
  - 4. Installation of new flashing lights and gates.
  - 5. Flagging services and other protective services and devices as may be necessary.
  - 6. Construction engineering and inspection to protect the interests of CSXT.

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**EXHIBIT B**

**PLANS AND SPECIFICATIONS**

**Plans, Specifications and Drawings:**

As of the date of this Agreement, the following plans, specifications and drawings have been submitted by City to CSXT for its review and approval:

<b>SHEET</b>	<b>DESCRIPTION</b>	<b>PREPARER</b>	<b>DATE</b>
1 of 129	Key Sheet	Element Eng.	7/1/19
2 of 129	Signature Sheet	Element Eng.	7/1/19
6 of 129	Drainage Map	Element Eng.	4/24/19
14 of 129	Typical Section Details	Element Eng.	7/1/19
20 of 129	General Notes	Element Eng.	7/1/19
23 of 129	Roadway Plan-Profiles	Element Eng.	7/1/19
28 of 129	Intersection Detail	Element Eng.	7/1/19
76-83 of 129	Temp. Traffic Control Plan	Element Eng.	4/24/19
87 of 129	Utility Adjustments	Element Eng.	4/24/19
95 of 129	Utility Relocation Sheets Sewer & Water	Element Eng.	4/24/19
H01	Proposed Crossing Layout Ph 1-4	Wabtec	7/2/19

# CITY OF TAMPA TRANSPORTATION DIVISION

## CONTRACT PLANS

CITY OF TAMPA PROJECT NO. 0000005  
 CONTRACT NO: 12-D-00057  
 FINANCIAL PROJECT ID 437044-1-54-01  
 ARMENIA AVENUE AT SR 580\BUSCH BOULEVARD  
 FROM JUST SOUTH OF HUMPHREY STREET TO  
 THE INTERSECTION OF SEWAHA STREET

### COMPONENTS OF CONTRACT PLANS SET

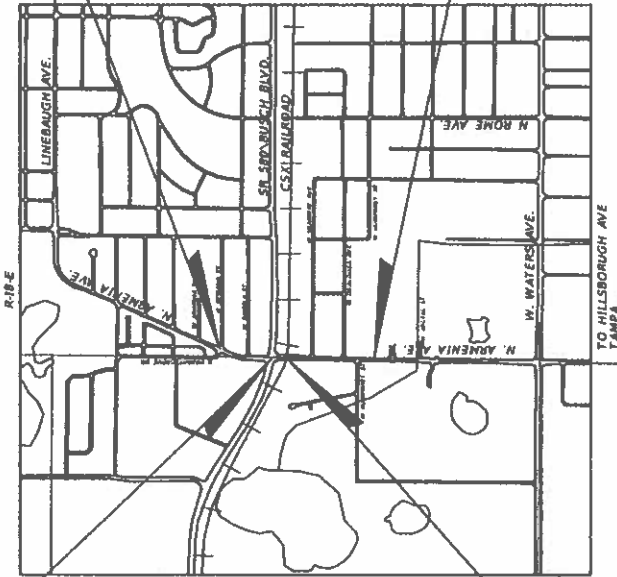
ROADWAY PLANS  
 SIGNING AND PAVEMENT MARKING PLANS  
 SIGNALIZATION PLANS

A DETAILED INDEX APPEARS ON THE  
 KEY SHEET OF EACH COMPONENT.

#### INDEX OF ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2	SIGNATURE SHEET
3 - 4	SUMMARY OF PAY ITEMS
5 - 9	DRAINAGE MAP
10 - 12	TYPICAL SECTION
13 - 14	SUMMARY OF DRAINAGE DETAILS
15	SUMMARY OF DRAINAGE STRUCTURES
16 - 17	PROJECT LAYOUT
18	GENERAL NOTES
19 - 20	ROADWAY PLAN-PROFILES
21 - 26	ALIGNMENT DETAIL
27	INTERSECTION DETAIL
28	DRAINAGE DETAILS
29 - 38	DRAINAGE STRUCTURES
39 - 41	POND CROSS SECTIONS
42	ROADWAY SOIL SURVEY
43	ROADWAY SOIL PROFILES
44 - 66	CROSS SECTIONS
67 - 71	DRIVEWAY HALF SECTIONS
72 - 75	STORM WATER POLLUTION PREVENTION PLAN
76 - 83	TEMPORARY TRAFFIC CONTROL PLAN
84 - 89	UTILITY ADJUSTMENTS
90 - 91	UTILITY RELOCATION SHEETS
92 - 100	SUMMARY OF QUANTITIES
50-1 - 50-19	

EQUATION  
 STA. 129+40.70 BK  
 STA. 129+37.70 AH



DOT #626889A  
 CSXT MP 5Y851.32  
 STA. 30+00.00 G. RR R/W  
 TO  
 MADRID

GOVERNING DESIGN STANDARDS: STA. 128+11.75 XS &  
 Florida Department of Transportation, FY 2018/19 Standard Plans for Road and Bridge Construction and applicable Standard Plans Interim Revisions (SPIRIs).  
 Standard Plans for Road Construction and SPIRs are available at the following website: <https://www.fdot.gov/design/standards>

And City of Tampa Stormwater Standards, which can be found at the following web site: [http://www.tampagov.net/sites/default/files/Stormwater/files/SW\\_Standard\\_details.pdf](http://www.tampagov.net/sites/default/files/Stormwater/files/SW_Standard_details.pdf)

For the City of Tampa Wastewater Department Technical Standards Guidelines for Construction of Wastewater Facilities Click on the "Technical Standards" link at the following web site: <https://www.tampagov.net/water/programs/establishing-water-service>

### LENGTH OF PROJECT

PROJECT LENGTH IS BASED ON THE Q SURVEY

ROADWAY	LINEAR FEET	MILES
BRIDGES	1668.10	0.316
NET LENGTH OF PROJECT	0.00	0.000
EXCEPTIONS	0.00	0.316
GROSS LENGTH OF PROJECT	1668.10	0.316

CITY PROJECT MANAGER: NINA MABILLEAU, E.I.



RECEIVED  
 STV Incorporated  
 July 1, 2019  
 OP# FL2051

REVISIONS FOR GENERAL COMPLIANCE WITH CONTRACT DOCUMENTS	NO EXCEPTION TAKEN	XXX
CONSTRUCTION OF DIMENSIONS OR DETAILS	EXCEPTIONS NOTED	
	AMEND & REVISIT	
	RE-JECTO - SEE REMARK	
STV INCORPORATED Date: 07/09/2019 by: JAS		

ROADWAY SHOP DRAWINGS  
 TO BE SUBMITTED TO:  
 DEREK M. GIL, P.E.  
 ELEMENT ENGINEERING GROUP  
 1713 E. 9TH AVENUE  
 TAMPA, FL 33605

PLANS PREPARED BY:



NOTE: THE SCALE OF THESE PLANS MAY  
 HAVE CHANGED DUE TO REPRODUCTION.

ROADWAY PLANS  
 ENGINEER OF RECORD: DEREK M. GIL

P.E. NO. - 54298

FISCAL YEAR	19
SHEET NO.	1

FINAL PLANS

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.009, F.A.C.

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

Derek M Gil

2019.07.01 13:22:32 -04'00'

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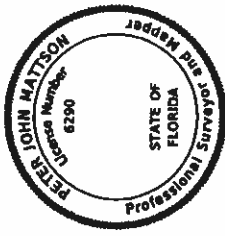
ELEMENT ENGINEERING GROUP  
1713 E. 9TH AVENUE  
TAMPA, FL 33606  
CERTIFICATE OF AUTHORIZATION 26921  
DEREK M. GIL P.E., NO. 54798

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2	STANDARD SHEET
3 - 4	SUMMARY OF PAV. ITEMS
5 - 9	DRAINAGE MAP
10 - 12	TYPICAL SECTION
13 - 14	TYPICAL SECTION DETAILS
15	SUMMARY OF DRAINAGE STRUCTURES
16 - 17	PROJECT LAYOUT
18 - 20	GENERAL NOTES
21 - 26	ROADWAY PLAN-PROFILES
27	ALIGNMENT DETAIL
28	INTERSECTION DETAIL
29	DRAINAGE DETAILS
30 - 38	DRAINAGE STRUCTURES
39 - 41	POND CROSS SECTIONS
44 - 66	CROSS SECTIONS
67 - 71	DRIVEWAY HALF SECTIONS
72 - 75	STORM WATER POLLUTION PREVENTION PLAN
76 - 83	EMPAVEMENT CONTROL PLAN
84 - 89	UTILITY ADJUSTMENT
90 - 92	UTILITY RELOCATION SHEETS
91 - 97	SUMMARY OF QUANTITIES

SO-1 - SO-19



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ELEMENT ENGINEERING GROUP  
1713 E. 9TH AVENUE  
TAMPA, FL 33606  
CERTIFICATE OF AUTHORIZATION 26921  
PETER JOHN MATTISON, PMS NO. 6290

THE ABOVE NAMED PROFESSIONAL SURVEYOR AND MAPPER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 31-112.002, F.A.C.

ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
2	SIGNATURE SHEET
16	PROJECT CONTROL



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ON THE DATE ADJACENT TO THE SEAL PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MC SQUARED, INC.  
5804 BRECKENRIDGE PARKWAY  
WINTER HAVEN, FL 33884  
CERTIFICATE OF AUTHORIZATION 9191  
JOSEPH H. DISTEFANO, P.E., NO. 31939

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
2	SIGNATURE SHEET
42	ROADWAY SOIL SURVEY
43	ROADWAY SOIL PROFILE

DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION

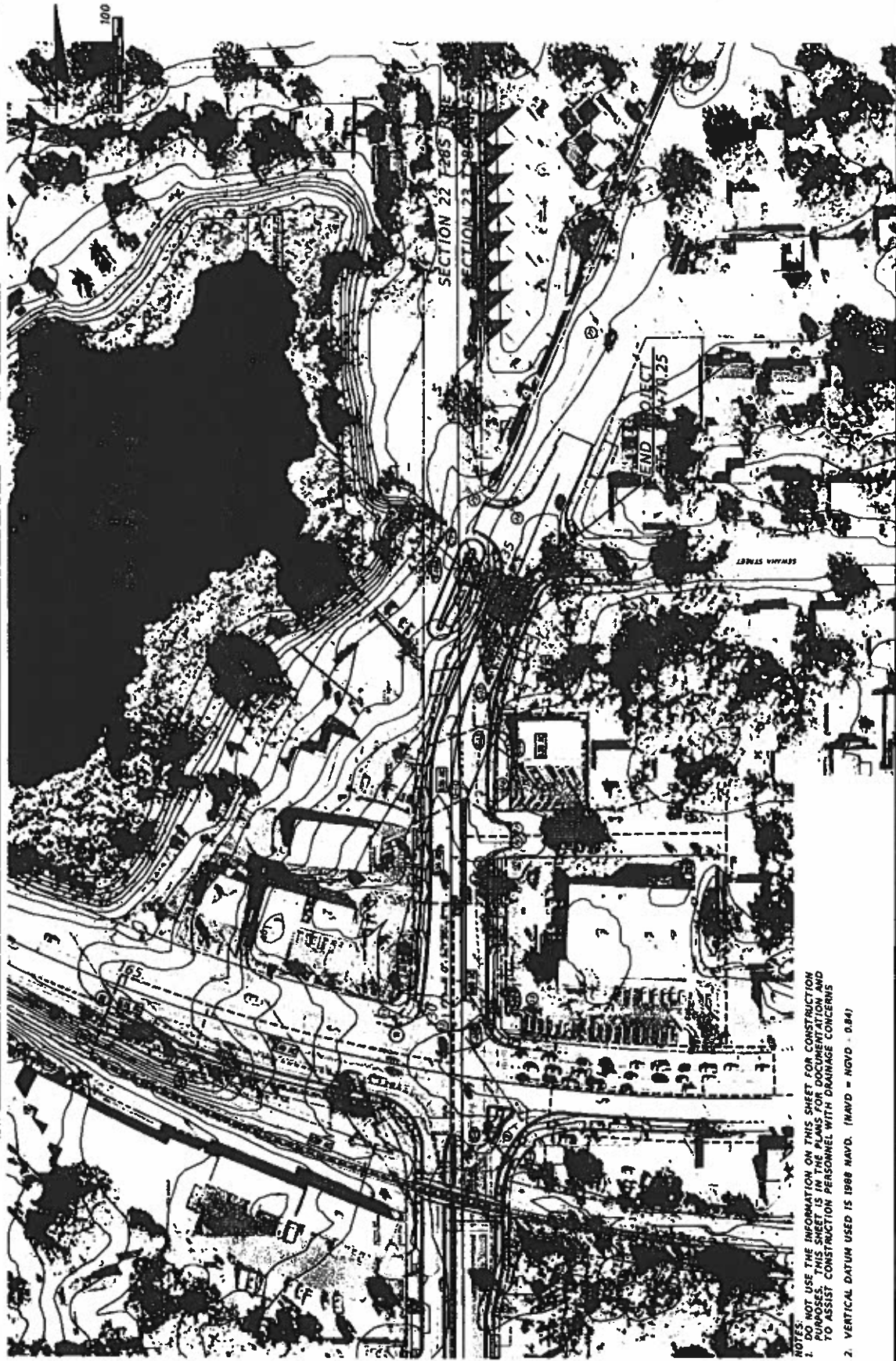
**ELEMENT**  
1713 E. 9th Avenue | Tampa, FL 33606  
P.L.L.C. | CERTIFICATE OF AUTHORIZATION #26921  
PETER JOHN MATTISON, PMS NO. 6290

CITY OF TAMPA  
TRANSPORTATION DIVISION  
CONTRACT NO. 12-D-00037  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 880/BUSCH BLVD.

**SIGNATURE SHEET**

SHEET NO. 2





NOTES:  
 1. DO NOT USE THE INFORMATION ON THIS SHEET FOR CONSTRUCTION PURPOSES. THIS SHEET IS IN THE PLANS FOR DOCUMENTATION AND TO ASSIST CONSTRUCTION PERSONNEL WITH DRAINAGE CONCERNS.  
 2. VERTICAL DATUM USED IS 1988 NAVD. (NAVD = NAVD - 0.84)

<p><b>ELEMENT</b>          1111 SOUTH MANASSAS AVENUE          PALM BEACH, FLORIDA 33480          CERTIFICATE OF AUTHORIZATION NUMBER 00001          6011 DORSEY AVE. PALM BEACH</p>		<p>CITY OF TAMPA          TRANSPORTATION DIVISION          CONTRACT NO. 13-500833          ARMENIA AVENUE INTERSECTION PROJECT          AT SR 580/BUSCH BLVD.</p>	<p>SHEET NO.          6</p>
DATE	DESCRIPTION	DATE	DESCRIPTION

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G19-23.004, F.A.C.

NOTE: CSX WILL REMOVE AND DISPOSE OF TRACK, TIES, BALLAST AND ANY CONTAMINATED MATERIAL. CSX WILL REMOVE PAVEMENT AND BASE AND STOCKPILE IT FOR REMOVAL BY CSX'S CONTRACTOR.

EXISTING ASPHALT TO BE SAWCUT PRIOR TO THE RECONSTRUCTION OF THE RAILROAD CROSSING BY CSX.

PAVEMENT REMOVAL AT RAILROAD CROSSING DETAIL  
NTS

EXISTING ASPHALT TO BE SAWCUT PRIOR TO THE RECONSTRUCTION OF THE RAILROAD CROSSING BY CSX.

PAVEMENT REMOVAL AT RAILROAD CROSSING DETAIL  
NTS

EXISTING PAVEMENT STRUCTURE

10' TEMP. ASPH. PAVING WEDGE

BALLAST (INSTALLED BY CSX) OR TEMP. PANT. BY CONTRACTOR

€ OF RR TRACK

TEMPORARY PAVING WEDGE DETAIL  
NTS

NOTES:

1. A TEMPORARY ASPHALT PAVING WEDGE SHALL BE PLACED TO PROTECT THE CROSSING UNTIL THE FINAL PAVEMENT IS CONSTRUCTED.
2. TEMPORARY PAVEMENT IS TO BE PAID FOR UNDER PAY ITEM 102-1, MAINTENANCE OF TRAFFIC, LS

EXISTING ASPHALT TO BE SAWCUT PRIOR TO THE RECONSTRUCTION OF THE RAILROAD CROSSING BY CSX.

PAVEMENT REMOVAL AT RAILROAD CROSSING DETAIL  
NTS

EXISTING PAVEMENT STRUCTURE

PROPOSED PAVEMENT SURFACE

MATCH TOP OF PROPOSED RAILROAD CROSSING ELEVATION (TYP.)

€ OF RR TRACK

SEE TYPICAL SECTION FOR PAVEMENT DESIGN (TYP.)

NOTE: THE THICKNESS OF THE OPTIONAL BASE (TYPE B-125) IF NEEDED TO ENSURE THE FINAL PAVEMENT ELEVATIONS MATCH THE RAILROAD CROSSING ELEVATIONS.

PAVEMENT REPLACEMENT RAILROAD CROSSING DETAIL  
NTS

NOTE: CSX WILL REMOVE AND DISPOSE OF TRACK, TIES, BALLAST AND ANY CONTAMINATED MATERIAL. CSX WILL REMOVE PAVEMENT AND BASE AND STOCKPILE IT FOR REMOVAL BY CSX'S CONTRACTOR.

EXISTING ASPHALT TO BE SAWCUT PRIOR TO THE RECONSTRUCTION OF THE RAILROAD CROSSING BY CSX.

PAVEMENT REMOVAL AT RAILROAD CROSSING DETAIL  
NTS

EXISTING ASPHALT

SAWCUT EXISTING ASPHALT AT SIDE STREETS (TYPICAL)

SIDE STREET MILLING LIMIT VARIES FROM EDGE OF TRAVEL LANE

EDGE OF TRAVEL LANE

FC-12.5 (1 1/4")

MILL DEPTH - SEE TYPICAL SECTIONS

Existing Base

MATCH EXISTING SIDE STREET PAVEMENT DETAIL  
NTS

EXISTING ASPHALT TO BE SAWCUT PRIOR TO THE RECONSTRUCTION OF THE RAILROAD CROSSING BY CSX.

PAVEMENT REMOVAL AT RAILROAD CROSSING DETAIL  
NTS

MINIMUM 5'-0"

2'-0"

LANDING 0.02 MAX

RAMP 1:12

RAMP 1:12

6" H. MONOLITHIC CAST CURB OR 6" x 12" SEPARABLE CAST CURB

BACK OF SIDEWALK

SIDEWALK

PLAN VIEW

MODIFIED C-R-C SIDEWALK RAMP DETAIL  
USED AT THE SR580/BUSCH BLVD. INTERSECTION  
NTS

EXISTING ASPHALT TO BE SAWCUT PRIOR TO THE RECONSTRUCTION OF THE RAILROAD CROSSING BY CSX.

PAVEMENT REMOVAL AT RAILROAD CROSSING DETAIL  
NTS

MINIMUM 5'-0"

2'-0"

LANDING 0.02 MAX

RAMP 1:12

RAMP 1:12

6" H. MONOLITHIC CAST CURB OR 6" x 12" SEPARABLE CAST CURB

BACK OF SIDEWALK

SIDEWALK

PLAN VIEW

MODIFIED C-R-C SIDEWALK RAMP DETAIL  
USED AT THE SR580/BUSCH BLVD. INTERSECTION  
NTS

DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION

**CITY OF TAMPA**  
**TRANSPORTATION DIVISION**  
CONTRACT NO. 22-00093  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 580/BUSCH BLVD.

**ELEMENT**  
1715 E. 9th AVENUE, TAMPA, FL 33606  
PHONE: 813.274.2200  
CERTIFICATE OF AUTHORIZATION: 1181141000  
E00110000110.01.00.00

**TYPICAL SECTION DETAILS**

SHEET NO. 14  
1/17/2019 10:48:37 AM P:\2017\22-00093\Drawings\1181141000.dwg

**CONTAMINATION NOTES**

THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER AND THE FOOT DISTRICT CONTAMINATION IMPACT COORDINATOR (DICIC) THREE WEEKS PRIOR TO ANY WORK BEING PERFORMED IN CONTAMINATION AREAS

SOIL ANALYTICAL RESULTS EXCEED CLEANUP TARGET LEVELS FOR INDUSTRIAL EXPOSURE AT THE FOLLOWING LOCATIONS

- a) STA 127+80 TO STA. 128+40 (LT AND RT) WITHIN THE CSX RIGHT OF WAY
- b) STA 128+22 TO STA. 129+00 (RT) FROM THE EXISTING CURB LINE TO THE RIGHT OF WAY
- c) STA. 129+65 TO STA. 131+80 (RT) FROM THE EXISTING CURB LINE TO THE RIGHT OF WAY

THE TOP SIX INCHES OF SOIL IN THESE AREAS SHALL BE REMOVED FOR DISPOSAL BY FOOT'S CONTAMINATION ASSESSMENT REMEDIATION CONTRACTOR (CAR). THE CITY WILL UTILIZE THE FOOT REMEDIATION CONTRACTOR THROUGH CITY PURCHASING DEPARTMENT. IN ADDITION ALL SOIL REMOVED FOR DRAINAGE INLETS, DRAINAGE PIPE EXCAVATIONS AND SIGNAL FOUNDATIONS SHALL ALSO BE REMOVED FOR DISPOSAL BY THE CAR

**RAIL GENERAL NOTES**

1. SUBMIT RAILROAD INSURANCE TO CSX AT [insurance@csx.com](mailto:insurance@csx.com) FOR CSX REVIEW AND APPROVAL ONCE APPROVED BY CSX. SUBMIT A COPY OF THE CSX-APPROVED RAILROAD INSURANCE AND APPROVAL LETTER. AS SPECIFIED IN THE SPECIAL PROVISIONS, TO THE ENGINEER AND DISTRICT RAIL OFFICE. WORK WILL NOT BE ALLOWED WITHIN THE CSX RIGHT-OF-WAY WITHOUT THE INSURANCE APPROVAL FROM CSX AND FLAGMAN CANNOT BE SCHEDULED. NOTE: APPROVAL OF INSURANCE CAN TAKE UP TO 30 TO 45 DAYS.
2. FLAGGING REQUIREMENTS - CONTACT THE DEPARTMENT'S ENGINEER AND DISTRICT RAIL OFFICE AT (813) 975-6402 TO REQUEST NEEDED FLAGMAN OR ACCESS TO CSX RIGHT-OF-WAY.  
NO WORK WILL BE PERFORMED WITHIN RAILROAD RIGHT OF WAY WITHOUT A RAILROAD FLAGMAN OR AUTHORIZED REPRESENTATIVE BEING PRESENT. ANTICIPATE AN 8 HOUR WORK WINDOW. TO OBTAIN A FLAGMAN, PROVIDE AN ESTIMATE OF START DATE, WORK DAYS, HOURS AND DURATION FOR WHICH A CSX FLAGMAN WILL BE NEEDED ON ACTIVITIES WITHIN THE CSX RIGHT-OF-WAY.  
PROJECTS WITH RAILROAD INVOLVEMENT OF 20 CONSECUTIVE DAYS OR MORE REQUIRE LONG TERM RAILROAD FLAGGING SERVICES (MAY TAKE THREE (3) TO SIX (6) MONTHS TO OBTAIN).  
PLAN TO ONLY HAVE ONE FLAGGER PER PROJECT. ALL ROADWAY WORK WITHIN THE RAILROAD RIGHT OF WAY MUST BE COMPLETED, DURING DAY TIME HOURS, WITHIN XX CONTRACT DAYS. THE WORK TO BE COMPLETED WILL INCLUDE ALL NECESSARY ITEMS NEEDED TO RELIEVE THE FLAGMAN FROM PROVIDING PROTECTIVE SERVICES. ALL COSTS FOR ANY ADDITIONAL DAYS OF FLAGGING DUE TO A CONTRACTOR CAUSED DELAY SHALL BE BORNE SOLELY BY THE CONTRACTOR.  
PROVIDE THE DEPARTMENT WITH A MINIMUM 45 DAY ADVANCE NOTICE OF BEGINNING WORK WITHIN THE RAILROAD RIGHT OF WAY TO ALLOW FOR THE SCHEDULING OF THE RAILROAD FLAGMAN. FAILURE TO MEET THE REQUIREMENTS OF THIS NOTE CONSTITUTES A FULL, COMPLETE, ABSOLUTE AND IRREVOCABLE WAIVER BY THE CONTRACTOR OF ANY RIGHT TO CLAIM FOR ADDITIONAL COMPENSATION OR A TIME EXTENSION RELATED TO WORK WITHIN THE RAILROAD RIGHT OF WAY.
3. RAILROAD CROSSING WORK - THE EXISTING CROSSING WILL BE RECONSTRUCTED BY THE RAILROAD OR THEIR SUB CONTRACTOR DURING THIS PROJECT. A TRAFFIC CONTROL OFFICER MUST BE PRESENT ON EACH SIDE OF THE RAILROAD WORK ZONE, 24 HOURS A DAY, FOR THE DURATION OF ANY WORK PERFORMED BY CSX OR CSX CONTRACTORS
4. PROVIDE A DUMP TRUCK, EQUIPMENT AND LABOR TO DISPOSE OF ALL ROADWAY DEBRIS EXCAVATED BY CSX OR CSX CONTRACTOR
5. DURING AND AFTER COMPLETION OF CONSTRUCTION WITHIN RAILROAD RIGHT OF WAY, CLEAR CSX'S DRAINAGE DITCHES AND SURROUNDING PROPERTIES OF ALL DEBRIS TO THE SATISFACTION OF CSX'S CONSTRUCTION ENGINEER AND INSPECTION REPRESENTATIVE.
6. DO NOT STORE MATERIAL OR EQUIPMENT ON RAILROAD'S PROPERTY
7. COMPLY WITH CSX CONSTRUCTION SUBMISSION CRITERIA, WHICH CAN BE LOCATED AT <https://www.csx.com/index.cfm/library/files/about-us/property/public-project-manual/>, UNDER PUBLIC PROJECTS MANUAL.
8. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY "DELAY OF TRAIN" PENALTIES IMPOSED BY THE RAILROAD. INVOICES FOR SUCH PENALTIES RECEIVED BY THE DEPARTMENT WILL BE FORWARDED TO THE CONTRACTOR FOR PAYMENT. IF THE CONTRACTOR FAILS TO PAY SUCH PENALTIES, THE DEPARTMENT MAY DEDUCT SAID AMOUNT FROM PAYMENTS MADE TO THE CONTRACTOR
9. ALL WORK ON, OVER, UNDER, OR ADJACENT TO CSX RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE CSX SPECIAL PROVISIONS FOUND IN THE CSX PUBLIC PROJECT MANUAL <https://www.csx.com/index.cfm/library/files/about-us/property/public-project-manual/>.
10. "ONE CALL" SERVICES DO NOT LOCATE BURIED RAILROAD SIGNAL AND COMMUNICATIONS LINES. CONTACT THE RAILROAD'S REPRESENTATIVE TWO (2) DAYS IN ADVANCE OF THOSE PLACES WHERE EXCAVATION PILE DRIVING, OR HEAVY LOADS MAY DAMAGE RAILROAD UNDERGROUND LINES ON RAILROAD PROPERTY. UPON REQUEST FROM THE CONTRACTOR OR AGENCY, RAILROAD SIGNAL FORCES WILL LOCATE AND PAINT MARK OR FLAG RAILROAD UNDERGROUND SIGNAL, COMMUNICATION, AND POWER LINES IN THE AREA TO BE DISTURBED. AVOID EXCAVATION OR OTHER DISTURBANCE OF THESE LINES WHICH ARE CRITICAL TO THE SAFETY OF THE RAILROAD AND THE PUBLIC. IF DISTURBANCE OR EXCAVATION IS REQUIRED NEAR A BURIED RAILROAD SIGNAL, COMMUNICATION, OR POWER LINE, HAND EXCAVATE THE LINE AND PROTECT THE LINE DURING THE COURSE OF THE DISTURBANCE UNDER THE SUPERVISION AND DIRECTION OF A RAILROAD SIGNAL REPRESENTATIVE.

REVISIONS	DATE	DESCRIPTION

ABBREVIATIONS:  
 EL = Existing Elevation  
 ELEV = PROPOSED ELEVATION

**ELEMENT**  
 1174 S. DR. AVENUE #1 TAMPA, FL 33606  
 PH: 813.281.1100 FAX: 813.281.1101  
 CORPORATION OF FLORIDA  
 1001 LINDSEY AVE. COL. THE WAYS

CITY OF TAMPA  
 TRANSPORTATION DIVISION  
 CONTRACT NO. 13-D-00057  
 ARMENIA AVENUE INTERSECTION PROJECT  
 AT SR 580/BUSCH BLVD.

**GENERAL NOTES**

SHEET NO.

20







TRAFFIC CONTROL GENERAL PHASING NOTES  
 UTILIZING STANDARD PLANS INDEX 102 SERIES, AND OTHER INDICES THAT MAY BE APPLICABLE IN ACCORDANCE WITH THE CONTRACTOR'S OPERATIONS.  
 PHASE I (STORM DRAIN CROSSINGS AND RAILROAD CROSSING)  
 COORDINATE WITH CSX FOR THEIR INSTALLATION OF SIGNAL GATES AND OTHER CROSSING SAFETY EQUIPMENT FOR PHASE I AND INCORPORATE THIS WORK INTO THE CONSTRUCTION SEQUENCING.  
 INSTALL PCS'S PER PLANS AND TTPC GENERAL NOTES.  
 INSTALL ADVANCE WARNING CONSTRUCTION SIGNS, BARRICADES AND TEMPORARY EROSION CONTROL DEVICES AS NEEDED OR INDICATED ON THE PLANS.  
 CONSTRUCT THE STORM DRAIN CROSSINGS UTILIZING LANE CLOSURES. CONSTRUCT S-1, S-1A, S-1B AND S-1C.  
 REMOVE THE EXISTING TRAFFIC SEPARATOR FROM STA. 126+74.96 TO STA. 128+77.38. PATCH ASPHALT TO CREATE A RIDEABLE SURFACE.  
 PLACE SIGNS AND PCS'S FOR DETOUR. SHIFT TRAFFIC USING LANE CLOSURES AS NECESSARY IN ACCORDANCE WITH STANDARD PLANS INDICES AND DETOUR PLAN AS SHOWN IN THESE PLANS.  
 ACTIVATE DETOUR. CLOSE THE RAILROAD CROSSING. CSX TO CONSTRUCT RAILROAD CROSSING IMPROVEMENTS.  
 COMPLETE THE ROAD WORK REQUIRED BY CSX RAILROAD AS DESCRIBED IN THE TEMPORARY TRAFFIC CONTROL GENERAL NOTES.  
 CONSTRUCT TEMPORARY PAVING WEDGE AT THE CROSSING.  
 RE-OPEN RAILROAD CROSSING AND REMOVE DETOUR.  
 PHASE II (WEST SIDE WIDENING)  
 COORDINATE WITH CSX FOR THEIR INSTALLATION OF SIGNAL GATES AND OTHER CROSSING SAFETY EQUIPMENT FOR PHASE II AND INCORPORATE THIS WORK INTO THE CONSTRUCTION SEQUENCING.  
 INSTALL TEMPORARY SIGNING AND PAVEMENT MARKINGS FOR PHASE II.  
 INSTALL BARRICADES AND TEMPORARY EROSION CONTROL DEVICES AS NEEDED FOR PHASE II.  
 SHIFT SOUTHBOUND LANE 4 FEET TO THE EAST. ADJACENT TO NORTHBOUND LANES.  
 SAWCUT EXISTING PAVEMENT ALONG THE WEST SIDE OF THE LOCATION OF THE PROPOSED MEDIAN SEPARATOR.  
 CONSTRUCT THE POND, STORM SEWER TRUNK LINE, CURB AND GUTTER AND PAVEMENT WIDENING, GRADING, SIDEWALK AND OTHER ITEMS BEHIND THE CURB ALONG THE WEST SIDE OF ARHENIA.  
 CONSTRUCT EASTBOUND RIGHT TURN LANE, CURB AND GUTTER, AND SIDEWALK ALONG BUSCH BOULEVARD WEST OF ARHENIA AVENUE AND ADJUST THE LENGTH OF THE TRAFFIC SEPARATOR.  
 CONSTRUCT TEMPORARY PAVEMENT IN THE PROPOSED ISLAND AREA FROM STA. 120+35 TO 121+10 LEFT.  
 INSTALL SOO AND PERMANENT EROSION CONTROL FEATURES.  
 PHASE III (EAST SIDE WIDENING)  
 COORDINATE WITH CSX FOR THEIR INSTALLATION OF SIGNAL GATES AND OTHER CROSSING SAFETY EQUIPMENT FOR PHASE III AND INCORPORATE THIS WORK INTO THE CONSTRUCTION SEQUENCING.  
 INSTALL TEMPORARY SIGNING AND PAVEMENT MARKINGS FOR PHASE III.  
 INSTALL BARRICADES AND TEMPORARY EROSION CONTROL DEVICES AS NEEDED FOR PHASE III.  
 ADJUST SIGNAL HEADS AND SHIFT SOUTHBOUND LANE TO THE WEST ONTO NEWLY CONSTRUCTED PAVEMENT.  
 CONSTRUCT THE STORM SEWER, CURB AND GUTTER AND PAVEMENT WIDENING, GRADING, SIDEWALK AND OTHER ITEMS BEHIND THE CURB ALONG THE EAST SIDE OF ARHENIA.

CONSTRUCT PAVEMENT, CURB AND GUTTER, AND SIDEWALK ALONG EASTBOUND BUSCH BOULEVARD EAST OF ARHENIA AVENUE.  
 INSTALL SOO AND PERMANENT EROSION CONTROL FEATURES.  
 PHASE IV (RESURFACING AND MEDIAN CONSTRUCTION)  
 COORDINATE WITH CSX FOR THEIR INSTALLATION OF SIGNAL GATES AND OTHER CROSSING SAFETY EQUIPMENT FOR PHASE IV AND INCORPORATE THIS WORK INTO THE CONSTRUCTION SEQUENCING.  
 INSTALL TEMPORARY SIGNING AND PAVEMENT MARKINGS FOR PHASE IV.  
 SHIFT SOUTHBOUND AND NORTHBOUND TRAFFIC TO THE OUTSIDE.  
 UNDER LANE CLOSURES MILL AND RESURFACE THE REMAINING PAVEMENT. INSTALL TEMPORARY PAVEMENT MARKINGS AFTER EACH DAY'S WORK.  
 CONSTRUCT THE MEDIAN SOUTH OF BUSCH BOULEVARD AND THE TRAFFIC SEPARATOR NORTH OF BUSCH BOULEVARD.  
 CONSTRUCT THE ISLAND IN THE SOUTHEAST QUADRANT OF THE INTERSECTION.  
 PHASE V (FRICTION COURSE AND PAVEMENT MARKING)  
 APPLY FRICTION COURSE AND FINAL PAVEMENT MARKINGS UTILIZING TRAFFIC SHIFTS.

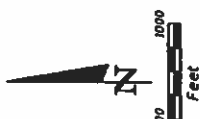
NO.	DESCRIPTION	DATE	REVISIONS

<b>ELEMENT</b> 1715 E. 9th AVENUE   TAMPA, FL 33606 P. 813.286.7000   WWW.ELEMENT.COM CERTIFICATE OF AUTHORIZATION NUMBER 10001 BOB10001636.001 OF 10700		CITY OF TAMPA TRANSPORTATION DIVISION CONTRACT NO. 12-000037 ARHENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.	SHEET NO. <b>77</b>
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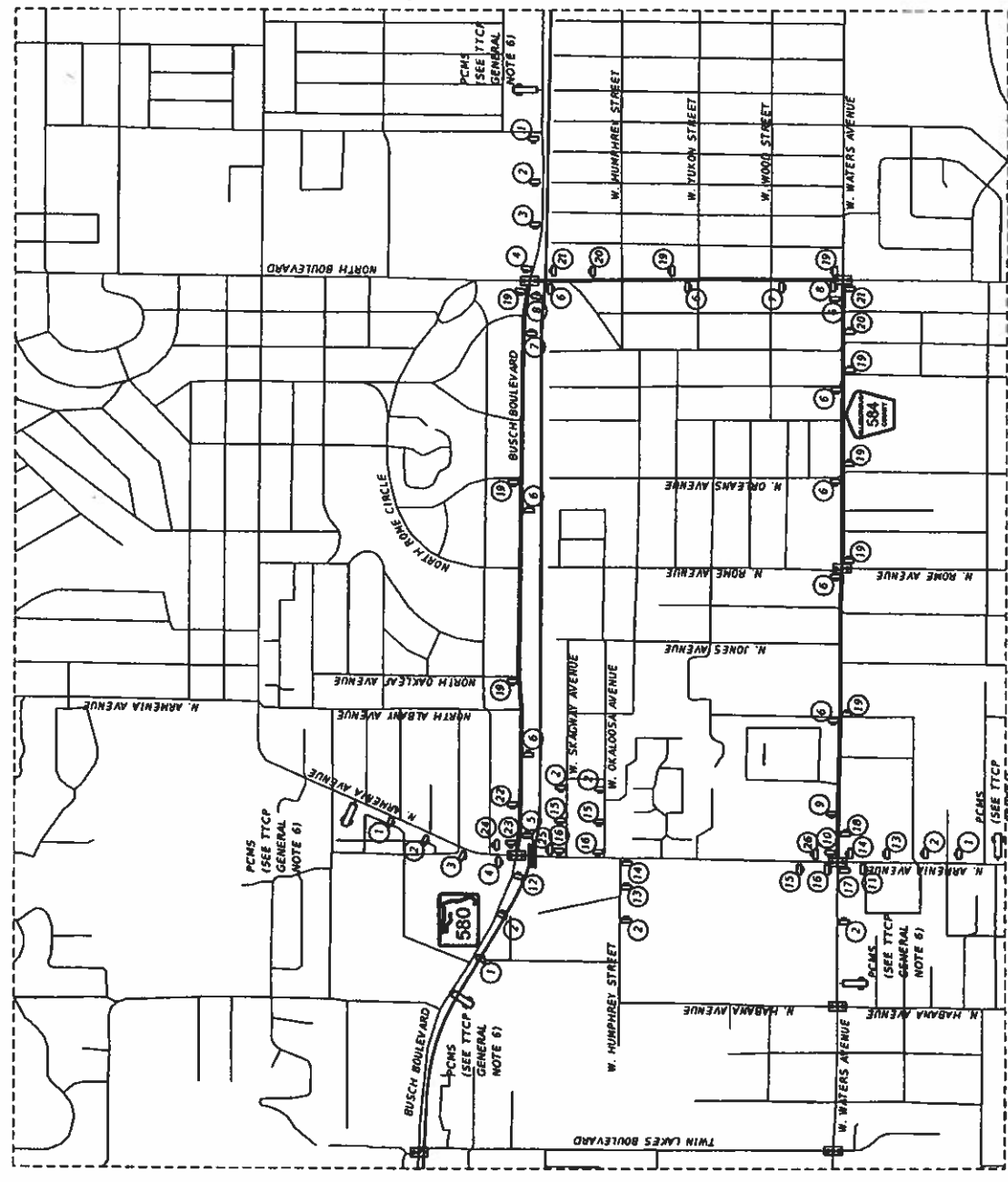
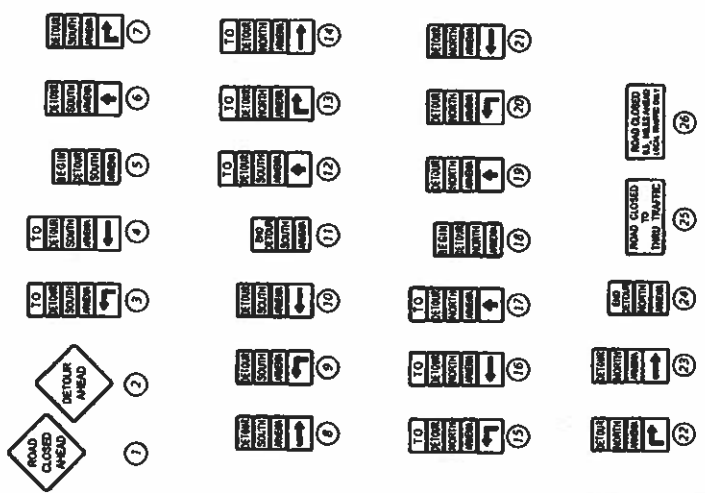






**LEGEND**

- Work Area
- Traffic Signal
- Work Zone Sign
- Distance Between Signs 200'
- Portable Changeable (Variable) Message Sign

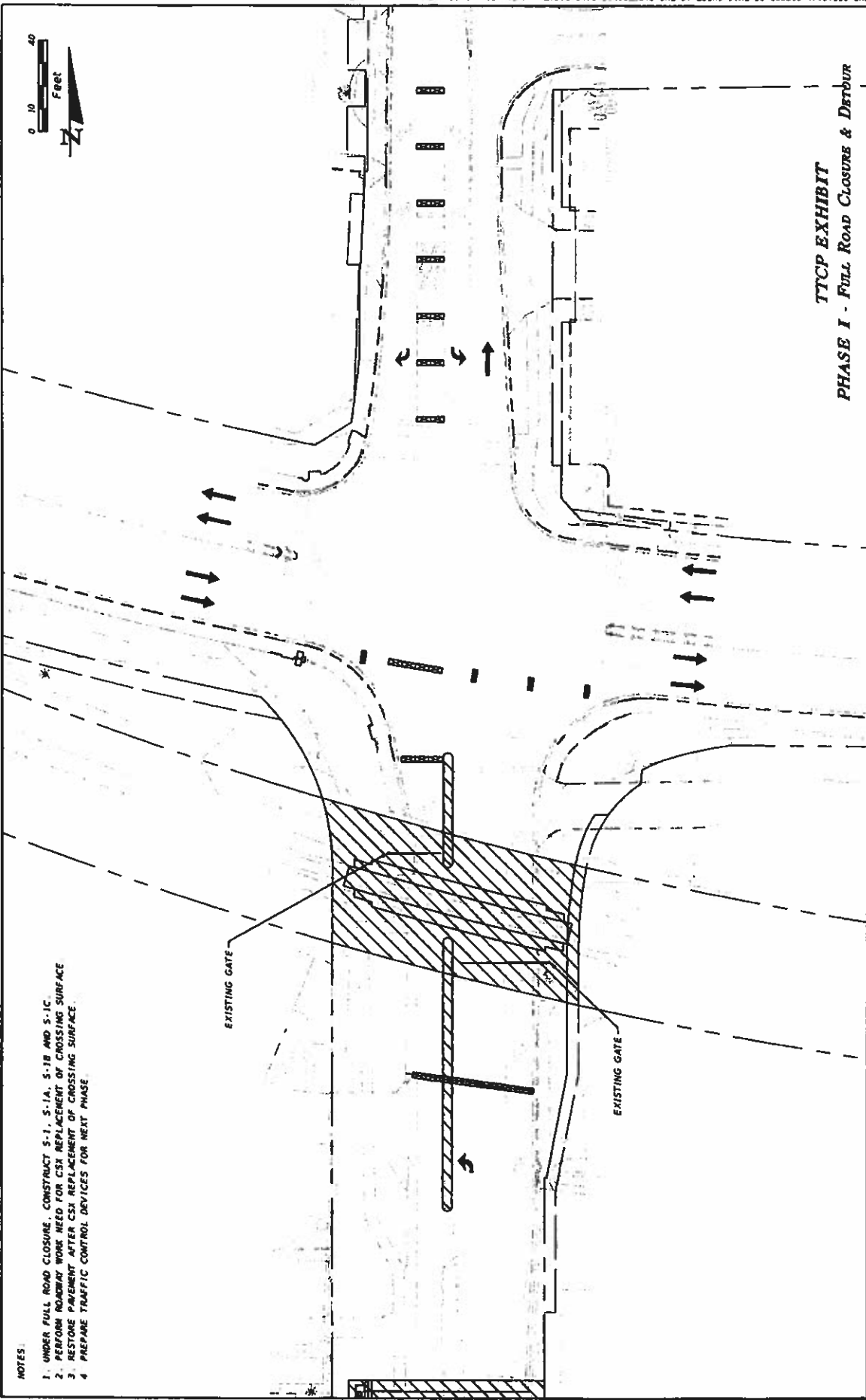


**FULL CLOSURE DETOUR**

DATE	DESCRIPTION	DATE	DESCRIPTION

<p><b>ELEMENT</b>                  1715 E. 8th Avenue   Tampa, FL 33606                  P: 813.241.1111   F: 813.241.1112                  CERTIFICATE OF AUTHORIZATION # 1000010000                  8001 JORJAN, N. CO. DE LUTON</p>		<p>CITY OF TAMPA                  TRANSPORTATION DIVISION                  CONTRACT NO. 13-D-00037                  ARMENIA AVENUE INTERSECTION PROJECT                  AT SR 580/BUSCH BLVD.</p>
<p>REVISIONS</p>		<p>9-13-21 24                  1/21/2019                  P:\2019\13-D-00037\CP\2019.rvt</p>



- NOTES:
1. UNDER FULL ROAD CLOSURE, CONSTRUCT S-1, S-1A, S-1B AND S-1C.
  2. PERFORM ROADWAY WORK NEED FOR CSX REPLACEMENT OF CROSSING SURFACE.
  3. RESTORE PAVEMENT AFTER CSX REPLACEMENT OF CROSSING SURFACE.
  4. PREPARE TRAFFIC CONTROL DEVICES FOR NEXT PHASE.

**TTCP EXHIBIT  
PHASE I - FULL ROAD CLOSURE & DETOUR**

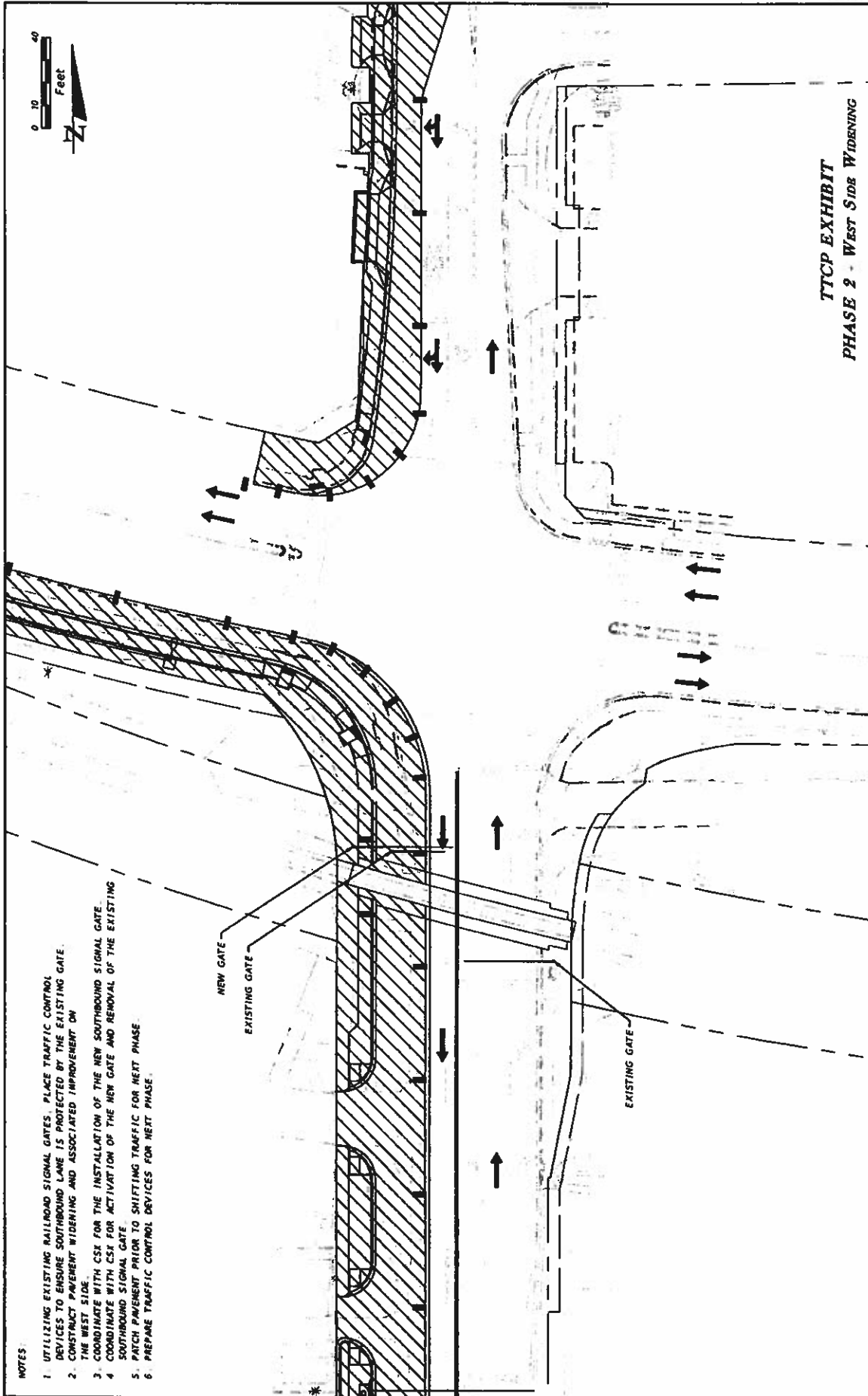
DATE	DESCRIPTION	DIVISIONS	DATE	DESCRIPTION

<b>ELEMENT</b> 1710 E. BR. AVENUE   TAMPA, FL 33606 P 813.220.1111   WWW.ELEMENT.COM   1001 LORRIN H. BL. W. 10TH CERTIFICATE OF AUTHORITY	CITY OF TAMPA TRANSPORTATION DIVISION CONTRACT NO. 12-D-00037 ARMENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.
---	---

TEMPORARY TRAFFIC CONTROL PLAN	SHEET NO. <b>80</b>
--------------------------------	------------------------



**NOTES:**

1. UTILIZING EXISTING RAILROAD SIGNAL GATES, PLACE TRAFFIC CONTROL DEVICES TO ENSURE SOUTHBOUND LANE IS PROTECTED BY THE EXISTING GATE.
2. CONSTRUCT PAVEMENT WIDENING AND ASSOCIATED IMPROVEMENT ON THE WEST SIDE.
3. COORDINATE WITH CSX FOR THE INSTALLATION OF THE NEW SOUTHBOUND SIGNAL GATE.
4. COORDINATE WITH CSX FOR ACTIVATION OF THE NEW GATE AND REMOVAL OF THE EXISTING SOUTHBOUND SIGNAL GATE.
5. PATCH PAVEMENT PRIOR TO SHIFTING TRAFFIC FOR NEXT PHASE.
6. PREPARE TRAFFIC CONTROL DEVICES FOR NEXT PHASE.

**TTCP EXHIBIT  
PHASE 2 - West Side Widening**

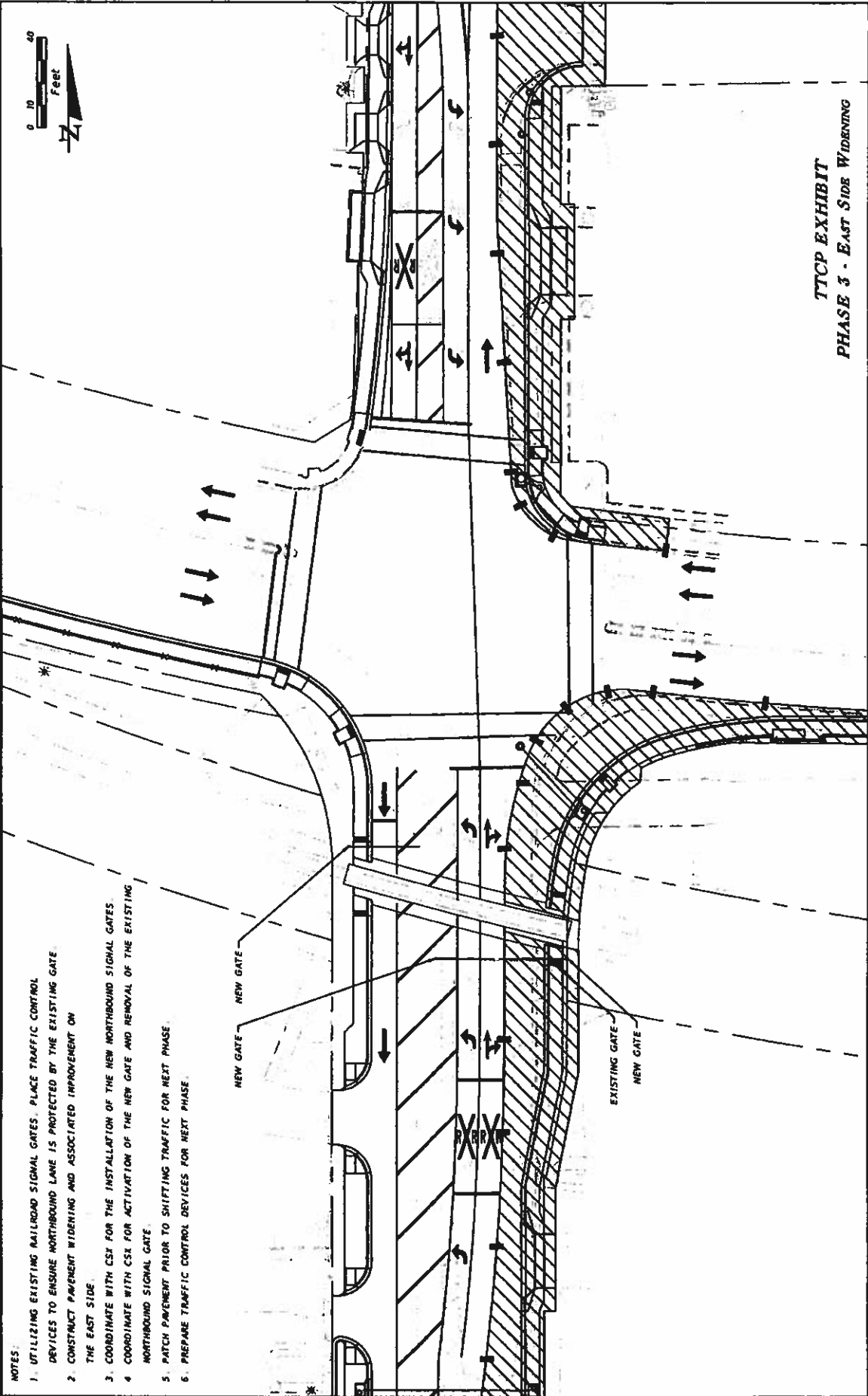
**TEMPORARY TRAFFIC  
CONTROL PLAN**

CITY OF TAMPA  
TRANSPORTATION DIVISION  
CONTRACT NO. 13-0-0005  
ARMENIA AVENUE INTERSECTION PROJECT  
AT SR 880/BUSCH BLVD.

**ELEMENT**  
1715 E. W. WARE ROAD  
TAMPA, FL 33605  
P 813.262.2901 (T) 813.262.2911 F 813.262.2900  
CERTIFICATE OF AUTHORIZATION (NUMBER) 00000000  
EARTH ENGINEERING, INC. P.C. 04/09

DATE	DESCRIPTION	REVISIONS	DATE	DESCRIPTION

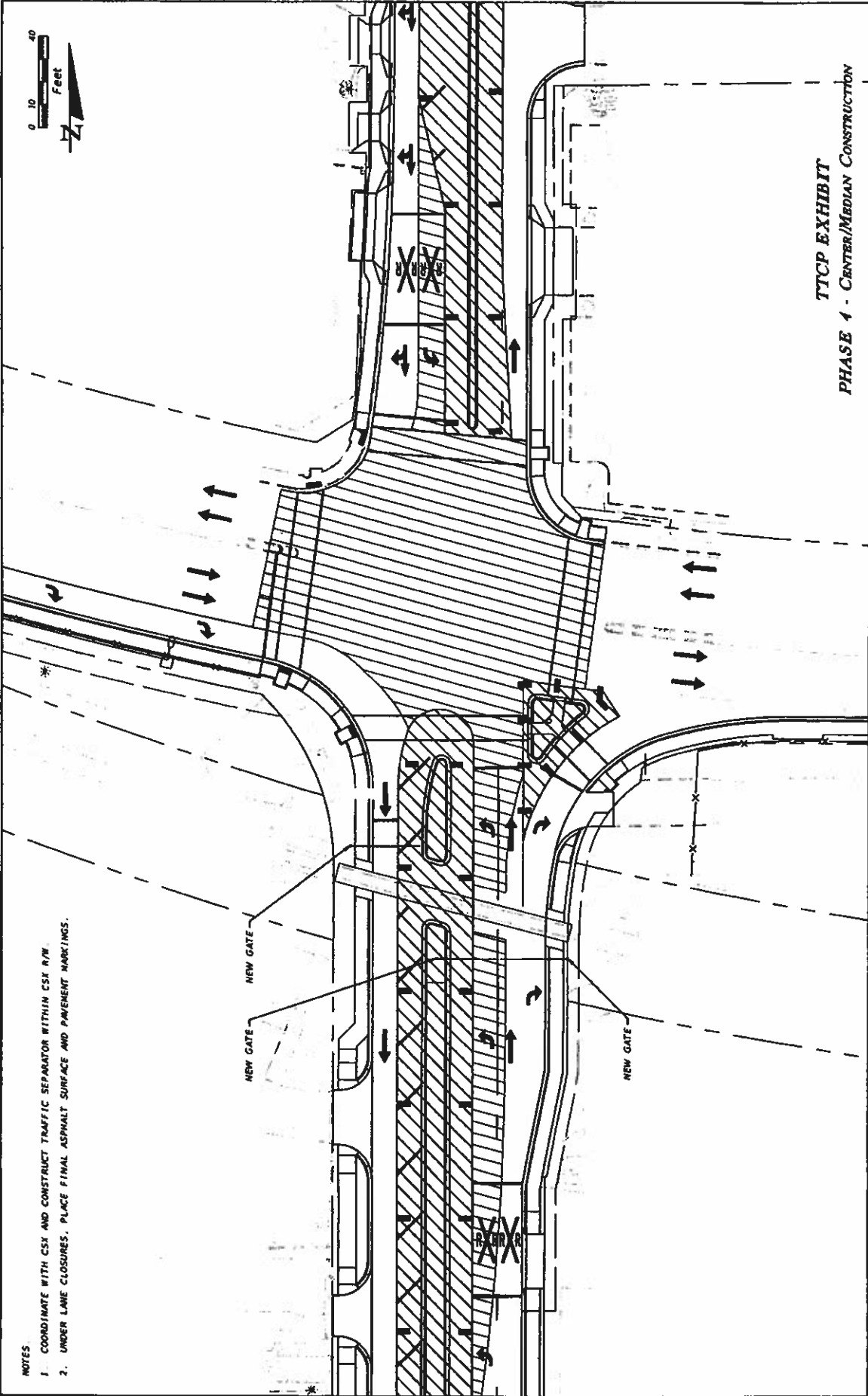
SHEET NO. 81



- NOTES:
1. UTILIZING EXISTING RAILROAD SIGNAL GATES, PLACE TRAFFIC CONTROL DEVICES TO ENSURE NORTHBOUND LANE IS PROTECTED BY THE EXISTING GATE.
  2. CONSTRUCT PAVEMENT WIDENING AND ASSOCIATED IMPROVEMENT ON THE EAST SIDE.
  3. COORDINATE WITH CSI FOR THE INSTALLATION OF THE NEW NORTHBOUND SIGNAL GATES.
  4. COORDINATE WITH CSI FOR ACTIVATION OF THE NEW GATE AND REMOVAL OF THE EXISTING NORTHBOUND SIGNAL GATE.
  5. PATCH PAVEMENT PRIOR TO SHIFTING TRAFFIC FOR NEXT PHASE.
  6. PREPARE TRAFFIC CONTROL DEVICES FOR NEXT PHASE.

**TTCP EXHIBIT**  
**PHASE 3 - EAST SIDE WIDENING**

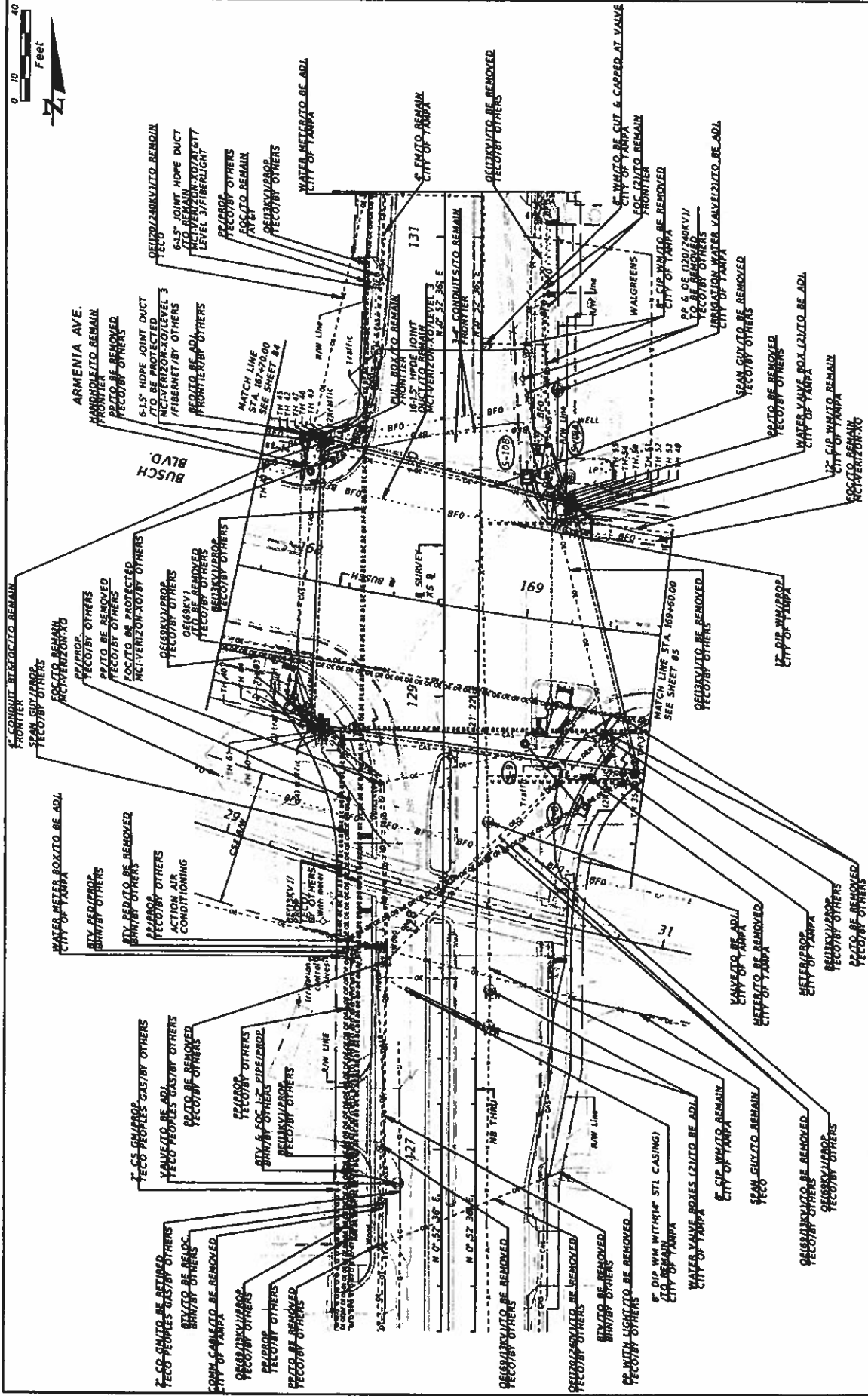
	CITY OF TAMPA TRANSPORTATION DIVISION CONTRACT NO. 13-0-00037	SHEET NO. <b>82</b>
<p><b>ELEMENT</b> 1713 E. W. AVENUE   TAMPA, FL 33605 A FULLY LICENSED PROFESSIONAL ENGINEER CERTIFICATE OF AUTHORIZATION #13818 ECON   TAMPA, FL, REG. NO. 12179</p>		<p>TEMPORARY TRAFFIC CONTROL PLAN</p>
DATE	REVISION	DATE



- NOTES:
1. COORDINATE WITH CSX AND CONSTRUCT TRAFFIC SEPARATOR WITHIN CSX R/W
  2. UNDER LANE CLOSURES, PLACE FINAL ASPHALT SURFACE AND PAVEMENT MARKINGS.

**TTCP EXHIBIT**  
**PHASE 4 - CENTER/MEDIAN CONSTRUCTION**

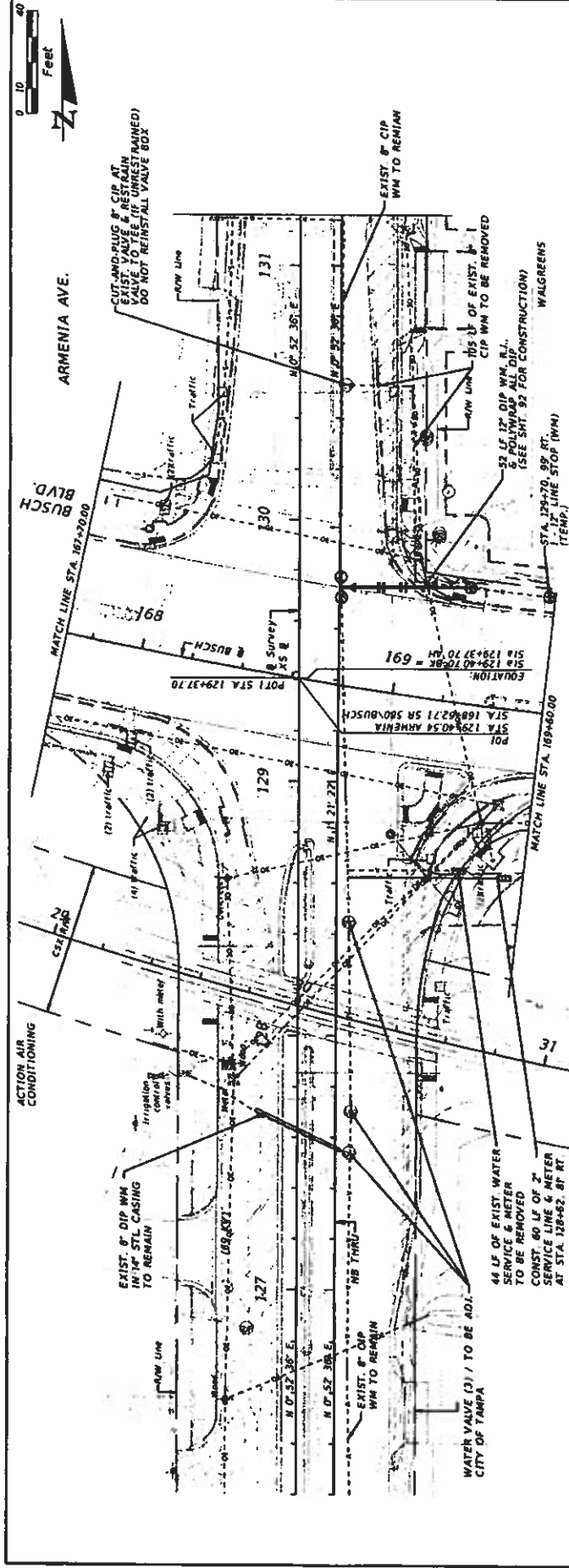
<p><b>TEMPORARY TRAFFIC CONTROL PLAN</b></p>		<p>SHEET NO. 83</p>
<p>CITY OF TAMPA TRANSPORTATION DIVISION CONTRACT NO. 13-0-00037</p>		<p>4/12/2015 4:15:27 PM P:\017\0174\2015\00037\13-0-00037.dwg</p>
<p><b>ELEMENT</b> 1715 E. 9th AVENUE TAMPA, FL 33606 P. BALASUBRAMANIAN, P.E. REGISTERED PROFESSIONAL ENGINEER CERTIFICATE OF AUTHORIZATION NO. 12001 ELEM17000004.001, 01/16/15</p>		
DATE	DESCRIPTION	REVISIONS



DATE	DESCRIPTION	REVISIONS	DATE

<b>ELEMENT</b> 1715 E. 9th AVENUE, TAMPA, FL 33606 PH: 813.241.1100 FAX: 813.241.1101 WWW.ELEMENT.COM REGISTERED PROFESSIONAL ENGINEER LICENSE NO. 12500		CITY OF TAMPA TRANSPORTATION DIVISION CONTRACT NO. 12-D-00037 ARMENIA AVENUE INTERSECTION PROJECT AT SR 580/BUSCH BLVD.	UTILITY ADJUSTMENTS SHEET NO. 87
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DATE	DESCRIPTION	DATE	DESCRIPTION
36		127	
40		128	
44		129	
48		130	
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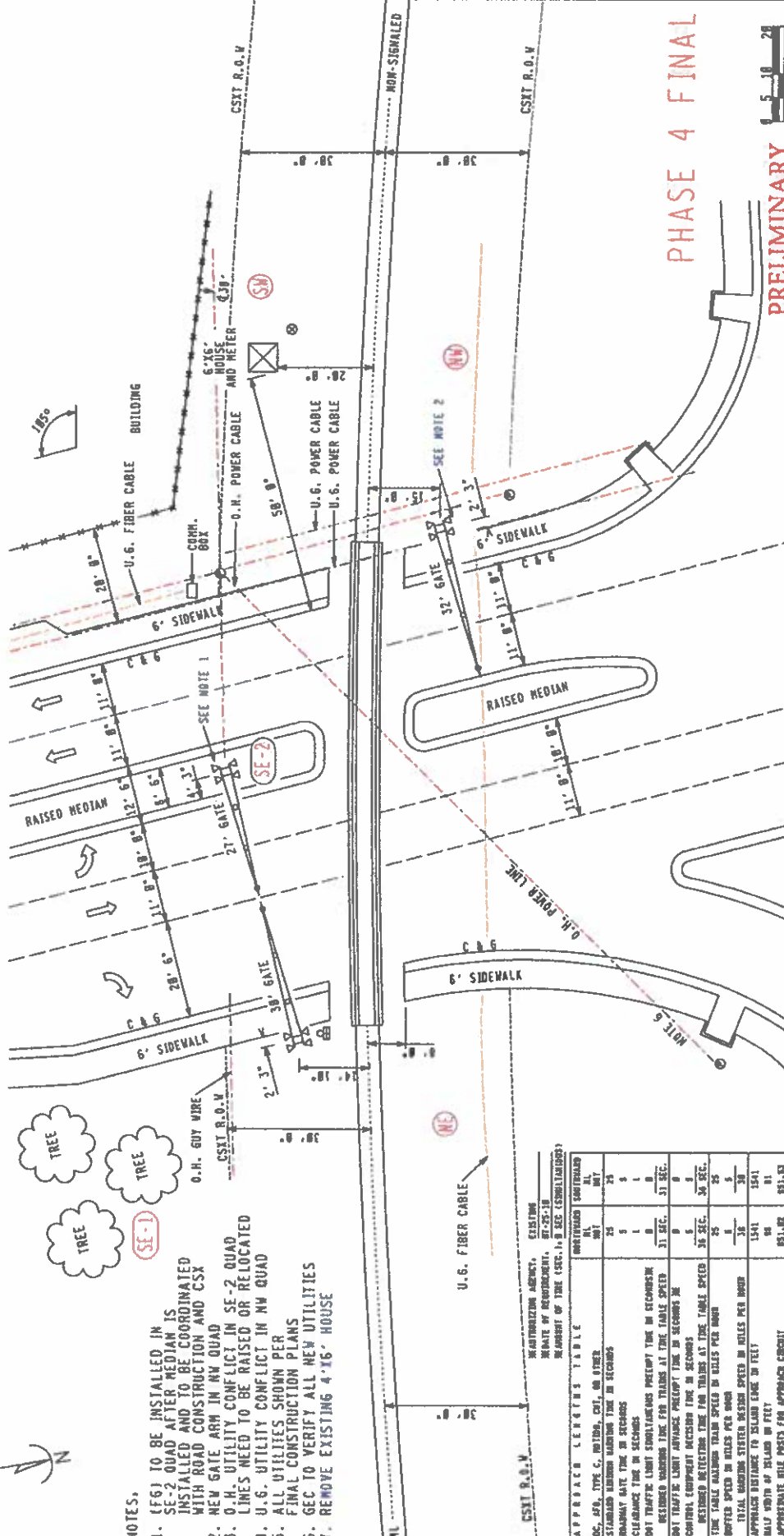
SCALE: 1"=40' HORIZ.  
1"=4' VERT.

<p><b>ELEMENT</b>                  1713 E. BUSCH AVENUE, TAMPA, FL 33613                  P. (813) 971-1100                  F. (813) 971-1101                  WWW.ELEMENT.COM</p>		<p>CITY OF TAMPA                  TRANSPORTATION DIVISION                  CONTRACT NO. 12-0-0003                  ARMENIA AVENUE INTERSECTION PROJECT                  AT SR 580/BUSCH BLVD.</p>	<p>UTILITY RELOCATION SHEETS                  SEWER &amp; WATER</p>	<p>SHEET NO. 95</p>
---	--	---	---	---------------------

R.R. NORTH TO TN

H.S. XXXXX

1541 FT. 90 FT. 90 FT. 1541 FT.



- NOTES:**
- (LEG) TO BE INSTALLED IN SE-2 QUAD AFTER MEDIAN IS INSTALLED AND TO BE COORDINATED WITH ROAD CONSTRUCTION AND CSX
  - NEW GATE ARM IN NW QUAD
  - O.H. UTILITY CONFLICT IN SE-2 QUAD LINES NEED TO BE RAISED OR RELOCATED
  - U.G. UTILITY CONFLICT IN NW QUAD
  - ALL UTILITIES SHOWN PER FINAL CONSTRUCTION PLANS
  - GEC TO VERIFY ALL NEW UTILITIES
  - REMOVE EXISTING 4'-16" HOUSE

**APPROACH LENGTHS TABLE**

DC, AFB, TYPE C, VERTICAL, CUT, OR OTHER STANDARD WARNING	EXISTING MILEAGE OF INSTRUMENT, 47-25-18	PROPOSED (FOOTING)
STANDARD WARNING	24	24
RAILWAY GATE TIME IN SECONDS	5	5
CLEARANCE TIME IN SECONDS	1	1
DRY TRAFFIC LIGHT SIMULTANEOUS PREEMPT TIME IN SECONDS	0	0
DESIGNED WARNING TIME FOR TRAINS AT THE TABLE SPEED	31	31
DRY TRAFFIC LIGHT ADVANCE PREEMPT TIME IN SECONDS	0	0
CONTROL EQUIPMENT ADVANCE TIME IN SECONDS	0	0
DESIGNED DETECTING TIME FOR TRAINS AT THE TABLE SPEED	56	56
TIME TABLE MAXIMUM TRAIN SPEED IN MILES PER HOUR	25	25
BUFFER SPEED IN MILES PER HOUR	0	0
TOTAL WARNING SYSTEM DESIGN SPEED IN MILES PER HOUR	38	38
APPROACH DISTANCE TO ISLAND CENE IN FEET	1541	1541
HALF WIDTH OF ISLAND IN FEET	64	64
APPROXIMATE MILE POSTS FOR APPROACH CENEITY	651.02	651.02

**PHASE 4 FINAL**  
**PRELIMINARY**



<b>LEGEND</b>	<b>GUARD RAIL</b>	<b>METER SERVICE</b>	<b>GPS COORDINATES</b>	<b>REVISION DATES</b>	<b>FILE NAME: S145132.H01</b>	<b>STREET NAME: CR-567 LARRENIA AVE. 1</b>
CSX ROV	O.H. POWER	POLE	28°01'59" N		DATE DRAWN: 07-02-19	CITY & STATE: TAMPA, FL 336
R/R POLELINE	FENCE	FIRE PLUG	82°29'43" W		DRAWN BY: XRL	DOT: 626889A
GAS	WATER	SEWER CAP	ELEV. 0'		CHECKED BY: XRL	PROJECT: FL2017442
FIBER OPTIC	SEWER	GAS VENT			XNL: 0109452	DP: FL2851
<b>PRODUCED BY: Wabtec Corporation</b>						
<b>RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS</b>						
<b>PROPOSED CROSSING LAYOUT SCALE = 20:1</b>						





R.R. NORTH TO FN

1541 FT.

H.S. XXIX+XX

98 FT.

1541 FT.



CSXT R.O.V.

CSXT R.O.V.

CSXT R.O.V.

RL

CSXT R.O.V.

CSXT R.O.V.

NON-SIGNALLED

- NOTES:
1. DURING ROAD CONSTRUCTION ALL WARNING DEVICES TO REMAIN ACTIVE.
  2. INSTALL 6'X6' HOUSE, METER POLE, AND PREEMPTION JCT IN SW QUAD.
  3. DO NOT REMOVE EXISTING 4'X6' HOUSE.
  4. AFTER THE COMPLETION OF WESTSIDE ROAD WIDENING, INSTALL NEW (FG) AND BELL IN NW QUAD AND REMOVE EXISTING (FG)
  5. EXISTING CFG IN SE QUAD WILL REMAIN ACTIVE.
  6. SB LANE MINIMUM 11'
  7. NB LANES MINIMUM 11'
  8. GEC TO VERIFY ALL NEW UTILITIES

PRIVATE DRIVEWAY

/// PHASE 3 CONSTRUCTION

**END PHASE 2  
BEGINNING PHASE 3**

**PRELIMINARY**



PRODUCED FOR,



RAIL TRANSPORT GROUP ENGINEERING  
COMMUNICATIONS AND SIGNALS



PRODUCED BY,

LEGEND	METER SERVICE	GPS COORDINATES	REVISION DATES	FILE NAME: SY05132.H01B
CSXT ROW	POLE	28091'58" N		
R/R POLELINE	FIRE PLUG	02°29'03" W		
GAS	SEWER CAP	ELEV. 0'		
FIBER OPTIC	6AS VENT			

GUARD RAIL	METER SERVICE	GPS COORDINATES	REVISION DATES	FILE NAME: SY05132.H01B
O.H. POWER	POLE	28091'58" N		
FENCE	FIRE PLUG	02°29'03" W		
WATER	SEWER CAP	ELEV. 0'		
SEWER	6AS VENT			

DATE	DATE	FILE NAME: SY05132.H01B	REVISION DATES	FILE NAME: SY05132.H01B
28091'58" N				
02°29'03" W				
ELEV. 0'				

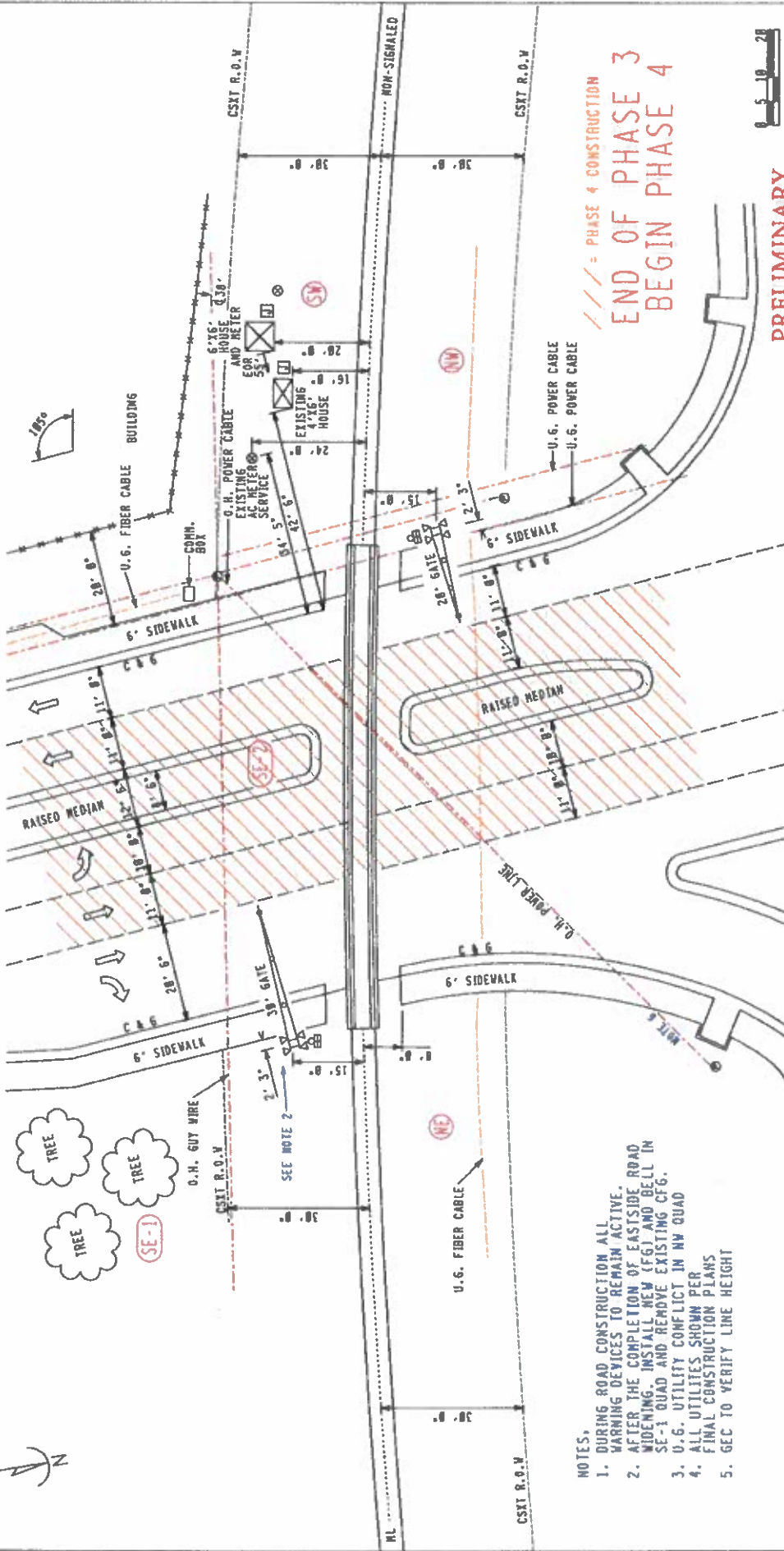
STREET NAME: (CR-5877) ARREQUIA AVE.	SCALE = 20:1
CITY & STATE: TAMPA, FL H.P. ST-851.32	
DRAWN BY: JRL	
CHECKED BY: JRL	
PROJECT #: FL2017442	
OP #: FL2051	

PROPOSED CROSSING LAYOUT

R.-R. NORTH TO TM

H.S. XXXX-XX

1541 FT. 98 FT. 98 FT. 1541 FT.



/// = PHASE 4 CONSTRUCTION  
 END OF PHASE 3  
 BEGIN PHASE 4

0 5 10 20

PRELIMINARY

PRODUCED FOR:	CSX TRANSPORTATION	PRODUCED BY:	Wabtec Corporation
RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
LEGEND	GUARD RAIL O.H. POWER FENCE WATER SEWER FIBER OPTIC	METER SERVICE POLE FIRE PLUG WATER SEWER GAS VENT	STREET NAME: CR-S07 (ARHENA AVE.) CITY: TAMPA, FL N.P. ST-851, 32 DATE: 08/22/19 DRAWN BY: XRL CHECKED BY: XRL PROJECT #: FL2817442 DP #: FL2851
CSXT R.O.W.	CSXT R.O.W.	GPS COORDINATES	28°01'59" N
R/W POLE LINE	R/W POLE LINE	REVISION DATES	08/22/19
GAS	GAS	ELEV.	8'
FIBER OPTIC	FIBER OPTIC		

- NOTES:
1. DURING ROAD CONSTRUCTION ALL WARNING DEVICES TO REMAIN ACTIVE.
  2. AFTER THE COMPLETION OF EASTSIDE ROAD WIDENING, INSTALL NEW (FGI) AND BELL IN SE-1 QUAD AND REMOVE EXISTING CFG.
  3. U.G. UTILITIES CONFLICT IN NW QUAD
  4. ALL UTILITIES SHOWN PER FINAL CONSTRUCTION PLANS
  5. GEC TO VERIFY LINE HEIGHT



CSX TRANSPORTATION

## EXHIBIT C

### CSXT SPECIAL PROVISIONS

#### DEFINITIONS:

As used in these Special Provisions, all capitalized terms shall have the meanings ascribed to them by the Agreement, and the following terms shall have the meanings ascribed to them below:

“CSXT” shall mean CSX Transportation, Inc., its successors and assigns.

“CSXT Representative” shall mean the authorized representative of CSX Transportation, Inc.

“Agreement” shall mean the Agreement between CSXT and City dated as of February 21, 2020, as amended from time to time.

“City” shall mean the City of Tampa.

“City Representative” shall mean the authorized representative of City of Tampa.

“Contractor” shall have the meaning ascribed to such term by the Agreement.

“Work” shall mean the Project as described in the Agreement.

#### I. AUTHORITY OF CSXT ENGINEER

The CSXT Representative shall have final authority in all matters affecting the safe maintenance of CSXT operations and CSXT property, and his or her approval shall be obtained by the City or its Contractor for methods of construction to avoid interference with CSXT operations and CSXT property and all other matters contemplated by the Agreement and these Special Provisions.

#### II. INTERFERENCE WITH CSXT OPERATIONS

- A. City or its Contractor shall arrange and conduct its work so that there will be no interference with CSXT operations, including train, signal, telephone and telegraphic services, or damage to CSXT’s property, or to poles, wires, and other facilities of tenants on CSXT’s Property or right-of-way. City or its Contractor shall store materials so as to prevent trespassers from causing damage to trains, or CSXT Property. Whenever Work is likely to affect the operations or safety of trains, the method of doing such Work shall first be submitted to the CSXT Representative for approval, but such approval shall not relieve City or its Contractor from liability in connection with such Work.



- B. If conditions arising from or in connection with the Project require that immediate and unusual provisions be made to protect train operation or CSXT's property, City or its Contractor shall make such provision. If the CSXT Representative determines that such provision is insufficient, CSXT may, at the expense of City or its Contractor, require or provide such provision as may be deemed necessary, or cause the Work to cease immediately.

**III. NOTICE OF STARTING WORK.** City or its Contractor shall not commence any work on CSXT Property or rights-of-way until it has complied with the following conditions:

- A. Notify CSXT in writing of the date that it intends to commence Work on the Project. Such notice must be received by CSXT at least ten business days in advance of the date City or its Contractor proposes to begin Work on CSXT property. The notice must refer to this Agreement by date. If flagging service is required, such notice shall be submitted at least thirty (30) business days in advance of the date scheduled to commence the Work.
- B. Obtain authorization from the CSXT Representative to begin Work on CSXT property, such authorization to include an outline of specific conditions with which it must comply.
- C. Obtain from CSXT the names, addresses and telephone numbers of CSXT's personnel who must receive notice under provisions in the Agreement. Where more than one individual is designated, the area of responsibility of each shall be specified.

**IV. WORK FOR THE BENEFIT OF THE CONTRACTOR**

- A. No temporary or permanent changes to wire lines or other facilities (other than third party fiber optic cable transmission systems) on CSXT property that are considered necessary to the Work are anticipated or shown on the Plans. If any such changes are, or become, necessary in the opinion of CSXT or City, such changes will be covered by appropriate revisions to the Plans and by preparation of a force account estimate. Such force account estimate may be initiated by either CSXT or City, but must be approved by both CSXT and City. City or Contractor shall be responsible for arranging for the relocation of the third party fiber optic cable transmission systems, at no cost or expense to CSXT.
- B. Should City or Contractor desire any changes in addition to the above, then it shall make separate arrangements with CSXT for such changes to be accomplished at the City or Contractor's expense.

**V. HAUL ACROSS RAILROAD**

- A. If City or Contractor desires access across CSXT property or tracks at other than an existing and open public road crossing in or incident to construction of the Project, the City or Contractor must first obtain the permission of CSXT and shall execute a license agreement or right of entry satisfactory to CSXT, wherein City or Contractor agrees to bear all costs and liabilities related to such access.**
- B. City and Contractor shall not cross CSXT's property and tracks with vehicles or equipment of any kind or character, except at such crossing or crossings as may be permitted pursuant to this section.**

**VI. COOPERATION AND DELAYS**

- A. City or Contractor shall arrange a schedule with CSXT for accomplishing stage construction involving work by CSXT. In arranging its schedule, City or Contractor shall ascertain, from CSXT, the lead time required for assembling crews and materials and shall make due allowance therefore.**
- B. City or Contractor may not charge any costs or submit any claims against CSXT for hindrance or delay caused by railroad traffic; work done by CSXT or other delay incident to or necessary for safe maintenance of railroad traffic; or for any delays due to compliance with these Special Provisions.**
- C. City and Contractor shall cooperate with others participating in the construction of the Project to the end that all work may be carried on to the best advantage.**
- D. City and Contractor understand and agree that CSXT does not assume any responsibility for work performed by others in connection the Project. City and Contractor further understand and agree that they shall have no claim whatsoever against CSXT for any inconvenience, delay or additional cost incurred by City or Contractor on account of operations by others.**

**VII. STORAGE OF MATERIALS AND EQUIPMENT**

**City and Contractor shall not store their materials or equipment on CSXT's property or where they may potentially interfere with CSXT's operations, unless City or Contractor has received CSXT Representative's prior written permission. City and Contractor understand and agree that CSXT will not be liable for any damage to such materials and equipment from any cause and that CSXT may move, or require City or Contractor to move, such material and equipment at City's or Contractor's sole expense. To minimize the possibility of damage to the railroad tracks resulting from the unauthorized use of equipment, all grading or other construction equipment that is left parked near the tracks**

unattended by watchmen shall be immobilized to the extent feasible so that it cannot be moved by unauthorized persons.

## VIII. CONSTRUCTION PROCEDURES

### A. General

1. Construction work on CSXT property shall be subject to CSXT's inspection and approval.
2. Construction work on CSXT property shall be in accord with CSXT's written outline of specific conditions and with these Special Provisions.
3. Contractor shall observe the terms and rules of the CSXT Safe Way manual, which City and Contractor shall be required to obtain from CSXT, and in accord with any other instructions furnished by CSXT or CSXT's Representative.

### B. Blasting

1. City or Contractor shall obtain CSXT Representative's and City Representative's prior written approval for use of explosives on or adjacent to CSXT property. If permission for use of explosives is granted, City or Contractor must comply with the following:
  - a. Blasting shall be done with light charges under the direct supervision of a responsible officer or employee of City or Contractor.
  - b. Electric detonating fuses shall not be used because of the possibility of premature explosions resulting from operation of two-way train radios.
  - c. No blasting shall be done without the presence of an authorized representative of CSXT. At least 10 days' advance notice to CSXT Representative is required to arrange for the presence of an authorized CSXT representative and any flagging that CSXT may require.
  - d. City or Contractor must have at the Project site adequate equipment, labor and materials, and allow sufficient time, to (i) clean up (at City's expense) debris resulting from the blasting without any delay to trains; and (ii) correct (at City's expense) any track misalignment or other damage to CSXT's property resulting from the blasting, as directed by CSXT Representative, without delay to trains. If City's

or Contractor's actions result in delay of any trains, including Amtrak passenger trains, City shall bear the entire cost thereof.

- e. City and Contractor shall not store explosives on CSXT property.
2. CSXT Representative will:
- a. Determine the approximate location of trains and advise City or Contractor of the approximate amount of time available for the blasting operation and clean-up.
  - b. Have the authority to order discontinuance of blasting if, in his or her opinion, blasting is too hazardous or is not in accord with these Special Provisions.

#### **IX. MAINTENANCE OF DITCHES ADJACENT TO CSXT TRACKS**

City or Contractor shall maintain all ditches and drainage structures free of silt or other obstructions that may result from their operations. City or Contractor shall provide erosion control measures during construction and use methods that accord with applicable state standard specifications for road and bridge construction, including either (1) silt fence; (2) hay or straw barrier; (3) berm or temporary ditches; (4) sediment basin; (5) aggregate checks; and (6) channel lining. All such maintenance and repair of damages due to City's or Contractor's operations shall be performed at City's expense.

#### **X. FLAGGING / INSPECTION SERVICE**

- A. CSXT has sole authority to determine the need for flagging required to protect its operations and property. In general, flagging protection will be required whenever City or Contractor or their equipment are, or are likely to be, working within fifty (50) feet of live track or other track clearances specified by CSXT, or over tracks.
- B. City shall reimburse CSXT directly for all costs of flagging that is required on account of construction within CSXT property shown in the Plans, or that is covered by an approved plan revision, supplemental agreement or change order.
- C. City or Contractor shall give a minimum of 10 days' advance notice to CSXT Representative for anticipated need for flagging service. No work shall be undertaken until the flag person(s) is/are at the job site. If it is necessary for CSXT to advertise a flagging job for bid, it may take up to 90-days to obtain this service, and CSXT shall not be liable for the cost of delays attributable to obtaining such service.



- D. CSXT shall have the right to assign an individual to the site of the Project to perform inspection service whenever, in the opinion of CSXT Representative, such inspection may be necessary. City shall reimburse CSXT for the costs incurred by CSXT for such inspection service. Inspection service shall not relieve City or Contractor from liability for its Work.
  
- E. CSXT shall render invoices for, and City shall pay for, the actual pay rate of the flagpersons and inspectors used, plus standard additives, whether that amount is above or below the rate provided in the Estimate. If the rate of pay that is to be used for inspector or flagging service is changed before the work is started or during the progress of the work, whether by law or agreement between CSXT and its employees, or if the tax rates on labor are changed, bills will be rendered by CSXT and paid by City using the new rates. City and Contractor shall perform their operations that require flagging protection or inspection service in such a manner and sequence that the cost of such will be as economical as possible.

**XI. UTILITY FACILITIES ON CSXT PROPERTY**

City shall arrange, upon approval from CSXT, to have any utility facilities on or over CSXT Property changed as may be necessary to provide clearances for the proposed trackage.

**XII. CLEAN-UP**

City or Contractor, upon completion of the Project, shall remove from CSXT's Property any temporary grade crossings, any temporary erosion control measures used to control drainage, all machinery, equipment, surplus materials, falsework, rubbish, or temporary buildings belonging to City or Contractor. City or Contractor, upon completion of the Project, shall leave CSXT Property in neat condition, satisfactory to CSXT Representative.

**XIII. FAILURE TO COMPLY**

If City or Contractor violate or fail to comply with any of the requirements of these Special Provisions, (a) CSXT may require City and/or Contractor to vacate CSXT Property; and (b) CSXT may withhold monies due City and/or Contractor; (c) CSXT may require City to withhold monies due Contractor; and (d) CSXT may cure such failure and the City shall reimburse CSXT for the cost of curing such failure.

Tampa, Hillsborough County, FL;  
 CR-587/Armenia Ave. road widening with surface & signals  
 M.P. SY-851.32; DOT 626889A;  
 Florida Zone; Clearwater Subdivision  
 OP# \_\_\_\_\_

**EXHIBIT D**

**INITIAL ESTIMATE  
 ATTACHED**

ACCT. CODE : 700 - FLXXX

Form Revision  
 12/11/18

**ESTIMATE SUBJECT TO REVISION AFTER:** 9/18/2020 **DOT NO.:** 626889A  
**CITY:** Tampa **COUNTY:** Hillsborough **STATE:** FL  
**DESCRIPTION:** CR-587 / Armenia Ave. existing 72' concrete panel crossing surface replacement with 102' TUB-type platform crossing surface to accommodate roadway widening. Installation of (2) Roadway gates, (1) median gate, 6x8 signal house, motion train detection and power service.  
**ZONE:** Florida **SUB-DIV:** Clearwater **MILE POST:** SY-851 32  
**AGENCY PROJECT NUMBER:** City of Tampa

**PRELIMINARY ENGINEERING:**

212	Contracted & Administrative Engineering Services	\$	
	<b>Subtotal</b>	<b>\$</b>	

**CONSTRUCTION ENGINEERING/INSPECTION:**

212	Contracted & Administrative Engineering Services	\$	32,000
	<b>Subtotal</b>	<b>\$</b>	<b>32,000</b>

**FLAGGING SERVICE: (Contract Labor)**

70	Labor (Conductor-Flagman)	Days @	\$	
50	Labor (Foreman/Inspector)	Days @	\$	25,200
70	Additive 150.40% (Transportation Department)		\$	
50	Additive 149.50% (Engineering Department)		\$	37,674
230	Expenses (Engineering Department)	Days @	\$	3,750
230	Expenses (Transportation Department)	Days @	\$	
	<b>Subtotal</b>		<b>\$</b>	<b>66,624</b>

**SIGNAL & COMMUNICATIONS WORK:** \$ 283,419

**TRACK WORK:** \$ 223,078

**PROJECT SUBTOTAL:** \$ 605,121

900	CONTINGENCIES: 10.00%	\$	60,512
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**PROJECT TOTAL:** ..... \$ 665,633

**CURRENT AUTHORIZED BUDGET:** ..... \$

**TOTAL SUPPLEMENT REQUESTED:** ..... \$ 665,633

**DIVISION OF COST:**

Agency	<u>100.00%</u>	\$	665,633
Railroad	<u>0.00%</u>	\$	

**NOTE: Estimate is based on FULL CROSSING CLOSURE during work by Railroad Forces.**  
 This estimate has been prepared based on site conditions, anticipated work duration periods, material prices, labor rates, manpower and resource availability, and other factors known as of the date prepared. The actual cost for CSXT work may differ based upon the agency's requirements, their contractor's work procedures, and/or other conditions that become apparent once construction commences or during the progress of the work.

Office of Chief Engineer Public Projects--Jacksonville, Florida  
 Estimated prepared by: J. Brangenberg - STV, Incorporated Approved by: KSW CSXT Public Project Group  
 DATE: 09/19/19 REVISED: 01/00/00 DATE: 10/02/19

Tampa, Hillsborough County, FL;  
CR-587/Armenia Ave. road widening with surface & signals  
M.P. SY-851.32; DOT 626889A;  
Florida Zone; Clearwater Subdivision  
OP# \_\_\_\_\_

**EXHIBIT E**

**PAYMENT SCHEDULE**

**Advance Payment in Full**

Upon execution and delivery of notice to proceed with the Project, City will deposit with CSXT a sum equal to the Reimbursable Expenses, as shown by the Estimate. If CSXT anticipates that it may incur Reimbursable Expenses in excess of the deposited amount, CSXT will request an additional deposit equal to the then remaining Reimbursable Expenses which CSXT estimates that it will incur. CSXT shall request such additional deposit by delivery of invoices to City. City shall make such additional deposit in accordance with this Agreement.

**EXHIBIT F**

**INSURANCE REQUIREMENTS**

**I. Insurance Policies:**

City and Contractor, if and to the extent that either is performing work on or about CSXT's property, shall procure and maintain the following insurance policies:

1. Commercial General Liability coverage at their sole cost and expense with limits of not less than \$5,000,000 in combined single limits for bodily injury and/or property damage per occurrence, and such policies shall name CSXT as an additional named insured.
2. Statutory Worker's Compensation and Employers Liability Insurance with limits of not less than \$1,000,000, which insurance must contain a waiver of subrogation against CSXT and its affiliates (if permitted by state law).
3. Commercial automobile liability insurance with limits of not less than \$1,000,000 combined single limit for bodily injury and/or property damage per occurrence, and such policies shall name CSXT as an additional named insured.
4. Railroad protective liability insurance with limits of not less than \$5,000,000 combined single limit for bodily injury and/or property damage per occurrence and an aggregate annual limit of \$10,000,000, which insurance shall satisfy the following additional requirements:
  - a. The Railroad Protective Insurance Policy must be on the ISO/RIMA Form of Railroad Protective Insurance - Insurance Services Office (ISO) Form CG 00 35.
  - b. CSX Transportation must be the named insured on the Railroad Protective Insurance Policy.
  - c. Name and Address of Contractor and City must be shown on the Declarations page.
  - d. Description of operations must appear on the Declarations page and must match the Project description, including project or contract identification numbers.
  - e. Authorized endorsements must include the Pollution Exclusion Amendment - CG 28 31, unless using form CG 00 35 version 96 and later.
  - f. Authorized endorsements may include:

- (i) Broad Form Nuclear Exclusion - IL 00 21
- (ii) 30-day Advance Notice of Non-renewal or cancellation
- (iii) Required State Cancellation Endorsement
- (iv) Quick Reference or Index - CL/IL 240

g. Authorized endorsements may not include:

- (i) A Pollution Exclusion Endorsement except CG 28 31
- (ii) A Punitive or Exemplary Damages Exclusion
- (iii) A "Common Policy Conditions" Endorsement
- (iv) Any endorsement that is not named in Section 4 (e) or (f) above.
- (v) Policies that contain any type of deductible

5. All insurance companies must be A. M. Best rated A- and Class VII or better.

6. Such additional or different insurance as CSXT may require.

## II. Additional Terms

1. Contractor must submit the original Railroad Protective Liability policy, Certificates of Insurance and all notices and correspondence regarding the insurance policies to:

Insurancedocuments@csx.com

2. Neither City nor Contractor may begin work on the Project until it has received CSXT's written approval of the required insurance.

Tampa, Hillsborough County, FL;  
CR-587/Armenia Ave. road widening with surface & signals  
M.P. SY-851.32; DOT 626889A;  
Florida Zone; Clearwater Subdivision  
OP# \_\_\_\_\_

**SCHEDULE I**

**CONTRACTOR'S ACCEPTANCE**

To and for the benefit of CSX Transportation, Inc. ("CSXT") and to induce CSXT to permit Contractor on or about CSXT's property for the purposes of performing work in accordance with the Agreement dated February 21, 2020 between the City of Tampa, Hillsborough County, and CSXT, Contractor hereby agrees to abide by and perform all applicable terms of the Agreement, including, but not limited to Exhibits C and F to the Agreement, and Sections 3, 9 and 11 of the Agreement.

Contractor: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



# Southwest Florida Water Management District

2379 Broad Street, Brooksville, Florida 34604-6899  
(352) 796-7211 or 1-800-423-1476 (FL only)  
SUNCOM 628-4150 TDD only 1-800-231-6103 (FL only)  
On the Internet at: WaterMatters.org

An Equal  
Opportunity  
Employer

**Bartow Service Office**  
170 Century Boulevard  
Bartow, Florida 33830-7700  
(863) 534-1448 or  
1-800-492-7862 (FL only)

**Sarasota Service Office**  
6750 Fruitville Road  
Sarasota, Florida 34240-9711  
(941) 377-3722 or  
1-800-320-3503 (FL only)

**Tampa Service Office**  
7601 Highway 301 North  
Tampa, Florida 33637-6759  
(813) 985-7481 or  
1-800-836-0797 (FL only)

May 08, 2017

City of Tampa  
Attn: Nina Mabileau  
306 East Jackson Street, MC 290A4E  
Tampa, FL 33602

Subject: **Notice of Intended Agency Action - Approval  
ERP Individual Construction Major Modification**

Project Name: Armenia Ave @ Busch Boulevard Intersection Improvements  
App ID/Permit No: 728913 / 43009367.001  
County: Hillsborough  
Sec/Twp/Rge: S23/T28S/R18E, S22/T28S/R18E

Dear Permittee(s):

The Southwest Florida Water Management District (District) has completed its review of the application for Environmental Resource Permit modification. Based upon a review of the information you have submitted, the District hereby gives notice of its intended approval of the application.

The File of Record associated with this application can be viewed at <http://www.18.swfwmd.state.fl.us/erp/erp/search/ERPSearch.aspx> and is also available for inspection Monday through Friday, except for District holidays, from 8:00 a.m. through 5:00 p.m. at the District's Tampa Service Office, 7601 U.S. Highway 301 North, Tampa, Florida 33637.

If you have any questions or concerns regarding the application or any other information, please contact the Environmental Resource Permit Bureau in the Tampa Service Office.

Sincerely,

Michelle K. Hopkins, P.E.  
Bureau Chief  
Environmental Resource Permit Bureau  
Regulation Division

cc: Derek Gil, P.E., Element Engineering Group



# Southwest Florida Water Management District

2379 Broad Street, Brooksville, Florida 34604-6899  
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May 08, 2017

City of Tampa  
Attn: Nina Mabileau  
306 East Jackson Street, MC 290A4E  
Tampa, FL 33602

Subject: **Notice of Agency Action - Approval**  
**ERP Individual Construction Major Modification**

Project Name: Armenia Ave @ Busch Boulevard Intersection Improvements  
App ID/Permit No: 728913 / 43009367.001  
County: Hillsborough  
Sec/Twp/Rge: S23/T28S/R18E, S22/T28S/R18E

Dear Permittee(s):

The Southwest Florida Water Management District (District) is in receipt of your application for the Environmental Resource Permit modification. Based upon a review of the information you submitted, the application is approved.

Please refer to the attached Notice of Rights to determine any legal rights you may have concerning the District's agency action on the permit application described in this letter.

If approved construction plans are part of the permit, construction must be in accordance with these plans. These drawings are available for viewing or downloading through the District's Application and Permit Search Tools located at [www.WaterMatters.org/permits](http://www.WaterMatters.org/permits).

The District's action in this matter only becomes closed to future legal challenges from members of the public if such persons have been properly notified of the District's action and no person objects to the District's action within the prescribed period of time following the notification. The District does not publish notices of agency action. If you wish to limit the time within which a person who does not receive actual written notice from the District may request an administrative hearing regarding this action, you are strongly encouraged to publish, at your own expense, a notice of agency action in the legal advertisement section of a newspaper of general circulation in the county or counties where the activity will occur. Publishing notice of agency action will close the window for filing a petition for hearing. Legal requirements and instructions for publishing notices of agency action, as well as a noticing form that can be used, are available from the District's website at [www.WaterMatters.org/permits/noticing](http://www.WaterMatters.org/permits/noticing). If you publish notice of agency action, a copy of the affidavit of publication provided by the newspaper should be sent to the District's Tampa Service Office for retention in this permit's File of Record.



If you have any questions or concerns regarding your permit or any other information, please contact the Environmental Resource Permit Bureau in the Tampa Service Office.

Sincerely,

Michelle K. Hopkins, P.E.  
Bureau Chief  
Environmental Resource Permit Bureau  
Regulation Division

Enclosures:   Approved Permit w/Conditions Attached  
                  [As-Built Certification and Request for Conversion to Operation Phase](#)  
                  Notice of Authorization to Commence Construction  
                  Notice of Rights  
cc:             Derek Gil, P.E., Element Engineering Group

**SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT  
ENVIRONMENTAL RESOURCE  
INDIVIDUAL CONSTRUCTION MAJOR MODIFICATION  
PERMIT NO. 43009367.001**

**EXPIRATION DATE:**           **May 08, 2022**

**PERMIT ISSUE DATE:**   **May 08, 2017**

This permit is issued under the provisions of Chapter 373, Florida Statutes, (F.S.), and the Rules contained in Chapter 62-330, Florida Administrative Code, (F.A.C.). The permit authorizes the Permittee to proceed with the construction of a surface water management system in accordance with the information outlined herein and shown by the application, approved drawings, plans, specifications, and other documents, attached hereto and kept on file at the Southwest Florida Water Management District (District). Unless otherwise stated by permit specific condition, permit issuance constitutes certification of compliance with state water quality standards under Section 401 of the Clean Water Act, 33 U.S.C. 1341. All construction, operation and maintenance of the surface water management system authorized by this permit shall occur in compliance with Florida Statutes and Administrative Code and the conditions of this permit.

**PROJECT NAME:**                   Armenia Ave @ Busch Boulevard Intersection Improvements

**GRANTED TO:**                    City of Tampa  
  Attn: Nina Mabillean  
  306 East Jackson Street, MC 290A4E  
  Tampa, FL 33602

**OTHER PERMITTEES:**            N/A

**ABSTRACT:** This permit authorization is for the modification and replacement of a previously permitted stormwater management system, serving a roadway intersection, as named above and as shown on the approved construction drawings. The proposed activities include the construction of multiple turn lanes and safety related improvements to Armenia Avenue crossing Busch Boulevard and modification of a dry retention stormwater management system. The Engineer of Record has demonstrated that these activities will have a negligible impact on the surrounding water resources. The modification to Pond 1 is designed to maintain existing required treatment through dry retention, and attenuation of the stormwater runoff. The project site is located at the intersection of Armenia Avenue and Busch Boulevard in Tampa, Hillsborough County.

**OP. & MAIN. ENTITY:**            City of Tampa

**OTHER OP. & MAIN. ENTITY:**   N/A

**COUNTY:**                         Hillsborough

**SEC/TWP/RGE:**                   S23/T28S/R18E, S22/T28S/R18E

**TOTAL ACRES OWNED  
OR UNDER CONTROL:**

12.81

**PROJECT SIZE:**                 7.59 Acres

**LAND USE:**                     Road Projects

**DATE APPLICATION FILED:**     September 12, 2016

**AMENDED DATE:**                N/A

**I. Water Quantity/Quality**

POND No.	Area Acres @ Top of Bank	Treatment Type
1	0.06	ON-LINE RETENTION
	Total: <b>0.06</b>	

Water Quantity/Quality Comments:

No adverse off-site/on-site water quantity or quality impacts are expected as the pond that is being modified (Pond 1) will continue to satisfy the District's presumptive criteria for treatment and to limit the post-development peak discharge rate for the 25-year, 24-hour design storm event to that of the existing 25-year, 24-hour design storm event. The Engineer of Record has demonstrated that these activities will have a negligible impact on the surrounding water resources. All elevations referenced in this permit are in the NAVD 88 vertical datum.  
 A mixing zone is not required.  
 A variance is not required.

**II. 100-Year Floodplain**

Encroachment (Acre-Feet of fill)	Compensation (Acre-Feet of excavation)	Compensation Type	Encroachment Result* (feet)
0.00	0.00	No Encroachment	N/A

\*Depth of change in flood stage (level) over existing receiving water stage resulting from floodplain encroachment caused by a project that claims Minimal Impact type of compensation.

**III. Environmental Considerations**

No wetlands or other surface waters exist within the project area.

## Specific Conditions

1. If the ownership of the project area covered by the subject permit is divided, with someone other than the Permittee becoming the owner of part of the project area, this permit may be terminated, unless the terms of the permit are modified by the District or the permit is transferred pursuant to Rule 40D-1.6105, F.A.C. In such situations, each land owner shall obtain a permit (which may be a modification of this permit) for the land owned by that person. This condition shall not apply to the division and sale of lots or units in residential subdivisions or condominiums.
2. The Permittee shall retain the design professional registered or licensed in Florida, to conduct on-site observations of construction and assist with the as-built certification requirements of this project. The Permittee shall inform the District in writing of the name, address and phone number of the design professional so employed. This information shall be submitted prior to construction.
3. For dry bottom retention systems, the retention area(s) shall become dry within 72 hours after a rainfall event. If a retention area is regularly wet, this situation shall be deemed to be a violation of this permit.
4. This Permit No. 43009367.001, amends the previously issued Permit No. 40009367.000, and all conditions are replaced by the conditions herein upon transfer of this permit modification to the operation phase.
5. If limestone bedrock is encountered during construction of the stormwater management system, the District must be notified and construction in the affected area shall cease.
6. The Permittee shall notify the District of any sinkhole development in the stormwater management system within 48 hours of discovery and must submit a detailed sinkhole evaluation and repair plan for approval by the District within 30 days of discovery.
7. The Permitted Plan Set for this project includes Plan Sheets 1 through 24 and 26 through S-9 from the submittal received by the District on February 14, 2017 and Plan Sheet 25 from the submittal received by the District on March 3, 2017.
8. The operation and maintenance entity shall provide for the inspection of the permitted project after conversion of the permit to the operation and maintenance phase. For systems utilizing retention or wet detention, the inspections shall be performed five (5) years after operation is authorized and every five (5) years thereafter.

The operation and maintenance entity must maintain a record of each inspection, including the date of inspection, the name and contact information of the inspector, whether the system was functioning as designed and permitted, and make such record available upon request of the District.

Within 30 days of any failure of a stormwater management system or deviation from the permit, an inspection report shall be submitted using Form 62-330.311(1), "Operation and Maintenance Inspection Certification" describing the remedial actions taken to resolve the failure or deviation.

9. District staff must be notified in advance of any proposed construction dewatering. If the dewatering activity is likely to result in offsite discharge or sediment transport into wetlands or

surface waters, a written dewatering plan must either have been submitted and approved with the permit application or submitted to the District as a permit prior to the dewatering event as a permit modification. A water use permit may be required prior to any use exceeding the thresholds in Chapter 40D-2, F.A.C.

10. Off-site discharges during construction and development shall be made only through the facilities authorized by this permit. Water discharged from the project shall be through structures having a mechanism suitable for regulating upstream stages. Stages may be subject to operating schedules satisfactory to the District.
11. The permittee shall complete construction of all aspects of the stormwater management system, including wetland compensation (grading, mulching, planting), water quality treatment features, and discharge control facilities prior to beneficial occupancy or use of the development being served by this system.
12. The following shall be properly abandoned and/or removed in accordance with the applicable regulations:
  - a. Any existing wells in the path of construction shall be properly plugged and abandoned by a licensed well contractor.
  - b. Any existing septic tanks on site shall be abandoned at the beginning of construction.
  - c. Any existing fuel storage tanks and fuel pumps shall be removed at the beginning of construction.
13. All stormwater management systems shall be operated to conserve water in order to maintain environmental quality and resource protection; to increase the efficiency of transport, application and use; to decrease waste; to minimize unnatural runoff from the property and to minimize dewatering of offsite property.
14. This permit is valid only for the specific processes, operations and designs indicated on the approved drawings or exhibits submitted in support of the permit application. Any substantial deviation from the approved drawings, exhibits, specifications or permit conditions, including construction within the total land area but outside the approved project area(s), may constitute grounds for revocation or enforcement action by the District, unless a modification has been applied for and approved. Examples of substantial deviations include excavation of ponds, ditches or sump areas deeper than shown on the approved plans.

#### **GENERAL CONDITIONS**

1. The general conditions attached hereto as Exhibit "A" are hereby incorporated into this permit by reference and the Permittee shall comply with them.

**Michelle K. Hopkins, P.E.**

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Authorized Signature

## EXHIBIT A

### GENERAL CONDITIONS:

- 1 The following general conditions are binding on all individual permits issued under this chapter, except where the conditions are not applicable to the authorized activity, or where the conditions must be modified to accommodate, project-specific conditions.
  - a. All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with Rule 62-330.315, F.A.C., or the permit may be revoked and the permittee may be subject to enforcement action.
  - b. A complete copy of this permit shall be kept at the work site of the permitted activity during the construction phase, and shall be available for review at the work site upon request by the Agency staff. The permittee shall require the contractor to review the complete permit prior to beginning construction.
  - c. Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be installed immediately prior to, and be maintained during and after construction as needed, to prevent adverse impacts to the water resources and adjacent lands. Such practices shall be in accordance with the *State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation June 2007)*, and the *Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008)*, which are both incorporated by reference in subparagraph 62-330.050(8)(b)5, F.A.C., unless a project-specific erosion and sediment control plan is approved or other water quality control measures are required as part of the permit.
  - d. At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the Agency a fully executed Form 62-330.350(1), "Construction Commencement Notice,"[effective date], incorporated by reference herein (<http://www.flrules.org/Gateway/reference.asp?No=Ref-02505> ), indicating the expected start and completion dates. A copy of this form may be obtained from the Agency, as described in subsection 62-330.010(5), F.A.C. If available, an Agency website that fulfills this notification requirement may be used in lieu of the form.
  - e. Unless the permit is transferred under Rule 62-330.340, F.A.C., or transferred to an operating entity under Rule 62-330.310, F.A.C., the permittee is liable to comply with the plans, terms and conditions of the permit for the life of the project or activity.
  - f. Within 30 days after completing construction of the entire project, or any independent portion of the project, the permittee shall provide the following to the Agency, as applicable:
    1. For an individual, private single-family residential dwelling unit, duplex, triplex, or quadruplex - "Construction Completion and Inspection Certification for Activities Associated with a Private Single-Family Dwelling Unit" [Form 62-330.310(3)]; or
    2. For all other activities - "As-Built Certification and Request for Conversion to Operational Phase" [Form 62-330.310(1)].
    3. If available, an Agency website that fulfills this certification requirement may be used in lieu of the form.
  - g. If the final operation and maintenance entity is a third party:
    1. Prior to sales of any lot or unit served by the activity and within one year of permit issuance, or within 30 days of as- built certification, whichever comes first, the permittee shall submit, as applicable, a copy of the operation and maintenance documents (see sections 12.3 thru 12.3.3 of Volume I) as filed with the Department of State, Division of Corporations and a copy of any easement, plat, or deed restriction

needed to operate or maintain the project, as recorded with the Clerk of the Court in the County in which the activity is located.

2. Within 30 days of submittal of the as-built certification, the permittee shall submit "Request for Transfer of Environmental Resource Permit to the Perpetual Operation Entity" [Form 62-330.310(2)] to transfer the permit to the operation and maintenance entity, along with the documentation requested in the form. If available, an Agency website that fulfills this transfer requirement may be used in lieu of the form.
- h. The permittee shall notify the Agency in writing of changes required by any other regulatory agency that require changes to the permitted activity, and any required modification of this permit must be obtained prior to implementing the changes.
- i. This permit does not:
  1. Convey to the permittee any property rights or privileges, or any other rights or privileges other than those specified herein or in Chapter 62-330, F.A.C.;
  2. Convey to the permittee or create in the permittee any interest in real property;
  3. Relieve the permittee from the need to obtain and comply with any other required federal, state, and local authorization, law, rule, or ordinance; or
  4. Authorize any entrance upon or work on property that is not owned, held in easement, or controlled by the permittee.
- j. Prior to conducting any activities on state-owned submerged lands or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund, the permittee must receive all necessary approvals and authorizations under Chapters 253 and 258, F.S. Written authorization that requires formal execution by the Board of Trustees of the Internal Improvement Trust Fund shall not be considered received until it has been fully executed.
- k. The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities that may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any project authorized by the permit.
- l. The permittee shall notify the Agency in writing:
  1. Immediately if any previously submitted information is discovered to be inaccurate; and
  2. Within 30 days of any conveyance or division of ownership or control of the property or the system, other than conveyance via a long-term lease, and the new owner shall request transfer of the permit in accordance with Rule 62-330.340, F.A.C. This does not apply to the sale of lots or units in residential or commercial subdivisions or condominiums where the stormwater management system has been completed and converted to the operation phase.
- m. Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the project or activities to ensure conformity with the plans and specifications authorized in the permit.
- n. If any prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, work involving subsurface disturbance in the immediate vicinity of such discoveries shall cease. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section, at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Such subsurface work shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and notification

shall be provided in accordance with Section 872.05, F.S. (2012).

- o. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under Rule 62-330.201, F.A.C., provides otherwise.
  - p. The permittee shall provide routine maintenance of all components of the stormwater management system to remove trapped sediments and debris. Removed materials shall be disposed of in a landfill or other uplands in a manner that does not require a permit under Chapter 62-330, F.A.C., or cause violations of state water quality standards.
  - q. This permit is issued based on the applicant's submitted information that reasonably demonstrates that adverse water resource-related impacts will not be caused by the completed permit activity. If any adverse impacts result, the Agency will require the permittee to eliminate the cause, obtain any necessary permit modification, and take any necessary corrective actions to resolve the adverse impacts.
  - r. A Recorded Notice of Environmental Resource Permit may be recorded in the county public records in accordance with Rule 62-330.090(7), F.A.C. Such notice is not an encumbrance upon the property.
2. In addition to those general conditions in subsection (1) above, the Agency shall impose any additional project-specific special conditions necessary to assure the permitted activities will not be harmful to the water resources, as set forth in Rules 62-330.301 and 62-330.302, F.A.C., Volumes I and II, as applicable, and the rules incorporated by reference in this chapter.



SOUTHWEST FLORIDA  
WATER MANAGEMENT DISTRICT

NOTICE OF  
**AUTHORIZATION**  
TO COMMENCE CONSTRUCTION

Armenia Ave @ Busch Boulevard Intersection Improvements

PROJECT NAME

Road Projects

PROJECT TYPE

Hillsborough

COUNTY

S23/T28S/R18E, S22/T28S/R18E

SEC(S)/TWP(S)/RGE(S)

City of Tampa

PERMITTEE

APPLICATION ID/PERMIT NO: 728913 / 43009367.001

DATE ISSUED: May 08, 2017



Michelle K. Hopkins, P.E.

Issuing Authority

THIS NOTICE SHOULD BE CONSPICUOUSLY  
DISPLAYED AT THE SITE OF THE WORK

## Notice of Rights

### ADMINISTRATIVE HEARING

1. You or any person whose substantial interests are or may be affected by the District's intended or proposed action may request an administrative hearing on that action by filing a written petition in accordance with Sections 120.569 and 120.57, Florida Statutes (F.S.), Uniform Rules of Procedure Chapter 28-106, Florida Administrative Code (F.A.C.) and District Rule 40D-1.1010, F.A.C. Unless otherwise provided by law, a petition for administrative hearing must be filed with (received by) the District within 21 days of receipt of written notice of agency action. "Written notice" means either actual written notice, or newspaper publication of notice, that the District has taken or intends to take agency action. "Receipt of written notice" is deemed to be the fifth day after the date on which actual notice is deposited in the United States mail, if notice is mailed to you, or the date that actual notice is issued, if sent to you by electronic mail or delivered to you, or the date that notice is published in a newspaper, for those persons to whom the District does not provide actual notice.
2. Pursuant to Subsection 373.427(2)(c), F.S., for notices of intended or proposed agency action on a consolidated application for an environmental resource permit and use of state-owned submerged lands concurrently reviewed by the District, a petition for administrative hearing must be filed with (received by) the District within 14 days of receipt of written notice.
3. Pursuant to Rule 62-532.430, F.A.C., for notices of intent to deny a well construction permit, a petition for administrative hearing must be filed with (received by) the District within 30 days of receipt of written notice of intent to deny.
4. Any person who receives written notice of an agency decision and who fails to file a written request for a hearing within 21 days of receipt or other period as required by law waives the right to request a hearing on such matters.
5. Mediation pursuant to Section 120.573, F.S., to settle an administrative dispute regarding District intended or proposed action is not available prior to the filing of a petition for hearing.
6. A request or petition for administrative hearing must comply with the requirements set forth in Chapter 28-106, F.A.C. A request or petition for a hearing must: (1) explain how the substantial interests of each person requesting the hearing will be affected by the District's intended action or proposed action, (2) state all material facts disputed by the person requesting the hearing or state that there are no material facts in dispute, and (3) otherwise comply with Rules 28-106.201 and 28-106.301, F.A.C. Chapter 28-106, F.A.C. can be viewed at [www.flrules.org](http://www.flrules.org) or at the District's website at [www.WaterMatters.org/permits/rules](http://www.WaterMatters.org/permits/rules).
7. A petition for administrative hearing is deemed filed upon receipt of the complete petition by the District Agency Clerk at the District's Tampa Service Office during normal business hours, which are 8:00 a.m. to 5:00 p.m., Monday through Friday, excluding District holidays. Filings with the District Agency Clerk may be made by mail, hand-delivery or facsimile transfer (fax). The District does not accept petitions for administrative hearing by electronic mail. Mailed filings must be addressed to, and hand-delivered filings must be delivered to, the Agency Clerk, Southwest Florida Water Management District, 7601 Highway 301 North, Tampa, FL 33637-6759. Faxed filings must be transmitted to the District Agency Clerk at (813) 367-9776. Any petition not received during normal business hours shall be filed as of 8:00 a.m. on the next business day. The District's acceptance of faxed petitions for filing is subject to certain conditions set forth in the District's Statement of Agency Organization and Operation, available for viewing at [www.WaterMatters.org/about](http://www.WaterMatters.org/about).

## **JUDICIAL REVIEW**

1. Pursuant to Sections 120.60(3) and 120.68, F.S., a party who is adversely affected by District action may seek judicial review of the District's action. Judicial review shall be sought in the Fifth District Court of Appeal or in the appellate district where a party resides or as otherwise provided by law.
2. All proceedings shall be instituted by filing an original notice of appeal with the District Agency Clerk within 30 days after the rendition of the order being appealed, and a copy of the notice of appeal, accompanied by any filing fees prescribed by law, with the clerk of the court, in accordance with Rules 9.110 and 9.190 of the Florida Rules of Appellate Procedure (Fla. R. App. P.). Pursuant to Fla. R. App. P. 9.020(h), an order is rendered when a signed written order is filed with the clerk of the lower tribunal.

**Mission:**

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.



Ron DeSantis  
Governor

Scott A. Rivkees, MD  
State Surgeon General

**Vision:** To be the Healthiest State in the Nation

## Notification of Acceptance of Use of a General Permit

**Permittee:**

Element Engineering Group  
Derek M. Gil, President  
1713 E. 9<sup>th</sup> Avenue  
Tampa FL 33605

[dgil@elementeg.com](mailto:dgil@elementeg.com)

Location: At the intersection of Armenia Avenue and Busch Boulevard

**Permit Number:** 0168017-1510-DSGP-DEP

**Issue Date:** June 26, 2019

**Expiration Date:** June 26, 2024

**County:** Hillsborough

**Project Name:** Armenia Avenue at SR  
580/Busch Boulevard (FPID # 437044-1-54-01)

**Water Supplier:** Tampa Water Department

**PWS ID:** 6290327

Dear Mr. Gil:

On June 17, 2019, the Florida Department of Health - Hillsborough County received a "Notice of Intent to Use the General Permit for Construction of Water Main Extensions for PWSs" [DEP Form No. [62-555.900\(7\)](#)], under the provisions of Rule [62-4.530](#) and Chapter [62-555](#), Florida Administrative Code (F.A.C.). The proposed project includes 52 LF of 12-inch DIP to serve Existing infrastructure being replaced. There are no new demands.

Based upon the submitted Notice and accompanying documentation, this correspondence is being sent to advise that the Department does not object to the use of such general permit at this time. Please be advised that the Permittee is required to abide by Rule [62-555.405, F.A.C.](#), all applicable rules in Chapters [62-4](#), [62-550](#), [62-555](#), F.A.C., and the General Conditions for All General Drinking Water Permits (found in [62-4.540, F.A.C.](#)).

The Permittee shall comply with all sampling requirements specific to this project. These requirements are attached for review and implementation.

Pursuant to Rule [62-555.345, F.A.C.](#), the Permittee shall submit a certification of construction completion [DEP Form No. [62-555.900\(9\)](#)] to the Department and obtain approval, or clearance, from the Department before placing any water main extension constructed under this general permit into operation for any purpose other than disinfection or testing for leaks.

Within 30 days after the sale or legal transfer of ownership of the permitted project that has not been cleared for service in total by the Department, both the Permittee and the proposed Permittee shall sign and submit an application for transfer of the permit using Form [62-555.900\(8\), F.A.C.](#), with the appropriate fee. The permitted construction is not authorized past the 30-day period unless the permit has been transferred.

**Florida Department of Health – Hillsborough County**

Division of Environmental Health • Safe Drinking Water Program  
P.O. Box 5135  
Tampa, FL 33675-5135  
PHONE: (813) 307-8059 • FAX: (813) 272-7242



**Accredited Health Department**  
Public Health Accreditation Board

Permittee:  
Derek M. Gil, President  
Element Engineering Group

DEP File No.:  
0168017-1510-DSGP-DEP

Page 2

This permit will expire five years from the date of issuance. If the project has been started and not completed by that time, a new permit must be obtained before the expiration date in order to continue work on the project, per Rule [62-4.030, F.A.C.](#)

Should you have any questions, please contact me at (813) 307-8015 x 5933, or by email at [Noel.Corson@FLHealth.gov](mailto:Noel.Corson@FLHealth.gov).

Sincerely,



Noel Corson  
Professional Engineer III  
Safe Drinking Water Program  
NC/nc

Cc

[roy.mckenzie@tampagov.net](mailto:roy.mckenzie@tampagov.net), Tampa Water Department  
[matkinstall@elementeg.com](mailto:matkinstall@elementeg.com)



**Mission:**

To protect, promote & improve the health of all people in Florida through integrated state, county & community efforts.



**Ron DeSantis**  
Governor

**Vision:** To be the Healthiest State in the Nation

June 14, 2019

A. Mark Atkinstall, PE, MS | **Snr.** Project Engineer | Utility Coordinator

ELEMENT ENGINEERING GROUP, LLC  
1713 E. 9<sup>th</sup> AVENUE | TAMPA, FL 33605  
P: 813.386.2101 | F: 813.386.2106 | TF: 888.603.1942  
[MATKINSTALL@ELEMENTEG.COM](mailto:MATKINSTALL@ELEMENTEG.COM) | [WWW.ELEMENTEG.COM](http://WWW.ELEMENTEG.COM)

Subject: Permit Determination: **Permit Not Required**  
Project: City of Tampa - 437044-1 Armenia Ave at Busch: Water Main Replacement  
PWS: 6290327

Dear Mr. Atkinstall:

This acknowledges receipt of your email on May 24, 2019, which you inquired about the permitting requirements for the above referenced project.

Pursuant to Florida Administrative Code (F.A.C.) Rules 62-4.530 and 62-555.520, construction or alteration of a public water system component requires a permit unless your project meets the exceptions outlined in the Florida Administrative Code.

After review of the information submitted for this project, we have determined that a **permit is not required** from this office. The project revision includes:

- Remove: 1", 2", 6" and 8" WM and replace as follows:
- Install: 42 lf of 1" WM, 127 lf of 2" WM, 35 lf of 6" DIP and 650 lf of 8" DIP.

This determination is based solely on Florida Rules 62-555.520. This is exempt from FDEP permitting under 62-555.520 (1) (c) 2.

Should you have any questions, please contact me at (813) 307-8015 x 5933, or by email at [Noel.Corson@FLHealth.gov](mailto:Noel.Corson@FLHealth.gov).

Sincerely,

Noel Corson, Professional Engineer III, Safe Drinking Water Program  
Cc: Therese J. LaDouceur, Cindy Gatlin,

**CITY OF TAMPA  
UTILITY RELOCATION SCHEDULE**

Page 1 of 2

<b>CIP NO.</b>	<b>PROJECT NAME</b>	<b>PROJECT NO.</b>
0000005	Armenia Ave. at SR 580 / Busch Blvd. from just south of Humphrey St. to the intersection of Sewaha St.	437044-1-54-01

***THIS FORM TO BE INCLUDED IN CONSTRUCTION CONTRACT DOCUMENTS***

**Agency/Owner**      *AT&T Metro (Teleport Communications America, LLC)*

***Facilities Involved (Detail as to type and location of adjustments and relocations.):***  
**SEE PAGE 2**

1.	AT&T Metro has 1-1.5" HDPE Duct, in a Joint Duct Bank with MCI, consisting of 6-1.5" HDPE Ducts, running north to south along west side of Armenia Ave. 26'-40' west off BL survey from approximate STA 129+90 to STA 135+28.31.	AT&T Metro will follow MCI's lead.
----	--	------------------------------------

***Anticipated Construction Relocation Schedule***

*(Describe each phase and all work that can be done concurrently during each phase in relation to a construction activity.):*

**\*Working Days Estimated**

<b>Phase 1</b>	See Page 2	
	<b>Total Phase 1</b>	0DAYS
<b>Phase 2</b>	(a)	
	<b>Total Phase 2</b>	0 DAYS
<b>Phase 3</b>	(a)	
	<b>Total Phase 3</b>	0 DAYS
<b>Phase 4</b>	(a)	
	<b>Total Phase 4</b>	
	<b>Total Construction Working Days</b> <i>(including page 2 If Applicable)</i>	0 DAYS

**Preconstruction Items**

*(Explain Preliminary engineering, material procurement, R/W acquisition, contract negotiations, etc.)*

<b>Material Procurement (poles)</b>	0 DAYS
<b>Total Preconstruction Days</b> <i>(including page 2 If Applicable)</i>	0 DAYS

*\* Individual phases may be spread throughout the contract with begin and end dates as necessary to coordinate construction activities with the City of Tampa contractor and other utilities. The Agency/Owner shall cooperate with the City of Tampa contractor to include their adjustment/relocation work progress schedule prior to the preconstruction conference.*

*The above data is based on construction plans DATED 09/24/2018.*

*This AGENCY/OWNER is not responsible for circumstances beyond its normal control. However, the AGENCY/OWNER agrees to fully cooperate with the City of Tampa, and their Contractor, in abiding by the "Utility Coordination Procedures" and completing the project as expeditiously as possible. The AGENCY'S/OWNER'S field representatives can be contacted at:*

**(Field Representative)**      **Paul Robertson**      **Telephone Number:**      **813-546-7633**

SUBMITTED FOR THE AGENCY BY:	<i>Michael Johnson - PROJECT ENGINEER</i>	Date	<i>12/18/19</i>
APPROVAL BY:	<i>Paul Robertson</i> Engineer of Record	Date	12/19/19
	<i>Nina Matvilleau</i> City of Tampa Project Manager	Date	9/11/2020



**CITY OF TAMPA  
UTILITY RELOCATION SCHEDULE**

<b>CIP NO.</b>	<b>PROJECT NAME</b>	<b>PROJECT NO.</b>
0000005	Armenia Ave. at SR 580 from south of Humphrey St. to the intersection of Sewaha St.	437044-1-54-01

***THIS FORM TO BE INCLUDED IN CONSTRUCTION CONTRACT DOCUMENTS***

*Agency/Owner:* SDT Solutions, LLC. For AT&T Metro

**Facilities Involved (Continuation)**

- |    |  |                              |
|----|--|------------------------------|
| 2. | AT&T Metro has 1-1.5" HDPE Duct in a Joint Duct Bank with MCI, consisting of 6-1.5" HDPE Ducts, running east to west along the north side of Busch Blvd 47'-49' L of B/L from STA 164+99.68 to approximate STA 168+20. | AT&T will follow MCI's lead. |
| 3. | AT&T Metro has a Handhole 49' L of B/L at approximate STA 167+60.  | To remain in place           |

**Anticipated Construction Schedule (Continuation)**  
*(Additional Phases or Continuation of a Phase)*

**Working Days**  
**Estimated**

*Total Working Days* 0

**Preconstruction Items (Continuation)**

*Total Days* 0

**Special Notations**

- AT&T request two business days' notice to Sunshine One Call from FDOT contractor prior to working around all AT&T facilities.



**CITY OF TAMPA  
UTILITY RELOCATION SCHEDULE**

CIP NO.	PROJECT NAME	PROJECT NO.
0000005 / 12D57	Armenia Ave. at SR 580/Busch Blvd from Just S. of Humphrey St. to the Intersection of Sewaha St.	437044-1-54-01

***THIS FORM TO BE INCLUDED IN CONSTRUCTION CONTRACT DOCUMENTS***

*Agency/Owner*      BRIGHTHOUSE / CHARTER / SPECTRUM

*Facilities Involved* (Detail as to type and location of adjustments and relocations.):  
SEE PAGE 2

**Overhead & Buried FOC/Coaxial cables located on Armenia Ave.**

*Anticipated Construction Relocation Schedule*

(Describe each phase and all work that can be done concurrently during each phase in relation to a construction activity.):

**\*Working  
Days  
Estimated**

<i>Phase 1</i>	<b>All work to be done Prior to Construction See below for Construction Activities.  See Page 2</b>	
	<b>Total Phase 1</b>	<b>42 DAYS</b>
<i>Phase 2</i>	(a)	
	<b>Total Phase 2</b>	<b>0 DAYS</b>
<i>Phase 3</i>	(a)	
	<b>Total Phase 3</b>	<b>0 DAYS</b>
<i>Phase 4</i>	(a)	
	<b>Total Phase 4</b>	
	<b>Total Construction Working Days (including page 2 If Applicable)</b>	<b>42 Days</b>

**Preconstruction Items**

(Explain Preliminary engineering, material procurement, R/W acquisition, contract negotiations, etc.)

**Material Procurement (poles)**      **0 DAYS**

**Total Preconstruction Days  
(including page 2 If Applicable)**

*\* Individual phases may be spread throughout the contract with begin and end dates as necessary to coordinate construction activities with the City of Tampa contractor and other utilities. The Agency/Owner shall cooperate with the City of Tampa contractor to include their adjustment/relocation work progress schedule prior to the preconstruction conference.*

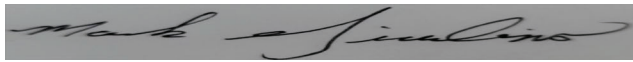


*The above data is based on construction plans DATED 2/20/2019.*

*This AGENCY/OWNER is not responsible for circumstances beyond its normal control. However, the AGENCY/OWNER agrees to fully cooperate with the City of Tampa, and their Contractor, in abiding by the "Utility Coordination Procedures" and completing the project as expeditiously as possible. The AGENCY'S/OWNER'S field representatives can be contacted at:*

Mark Giurbino

Telephone Number:

813-436-6431

SUBMITTED FOR THE AGENCY BY: <i>(name-Title)</i>		Date	11/27/2019
APPROVAL BY:	<i>Mark Giurbino - Construction Coordinator</i>		
		Date	12/19/19
	<i>Engineer of Record</i>		
		Date	9/11/2020
	<i>City of Tampa Project Manager</i>		

## UTILITY RELOCATION SCHEDULE

### **BURIED FACILITIES - TO REMAIN - 0 DAYS**

1. STA 116+91.14L - PULL BOX
2. STA 116+91.19L - CATV PEDESTAL
3. STA 116+91.19L to 116+91.24R - BTV/BFO\_3-2" CONDUITS
4. STA 171+65.34R to 171+65.49L - BTV\_1-2" P CONDUITS

### **AERIAL FACILITIES - TO REMAIN - 0 DAYS**

1. STA 132+11.55R to EXITING PROJ LIMITS - OTV/ATTACHED TO WOOD POLE
2. STA 132+12.55R BRIGHTHOUSE POLE TO REMAIN
3. STA 132+80.36L TO EXITING PROJ LIMITS -OTV/ATTACHED TO WOOD pole
4. STA 134+60.22L to 134+70.22L - OTV/ATTACHED TO WOOD POLE

### **BURIED FACILITIES - TO REMOVE - 7 DAYS**

1. STA 120+21.56L to 121+32.26L - BTV\_1-2" CONDUIT (2 DAYS)
2. STA 121+32.26L - CATV PEDESTAL (.5 DAYS)
3. STA 124+83.71R to 124+83.24L - BTV\_1-2" CONDUIT (REMOVE CABLE(S) & RETIRE CONDUIT IN PLACE) (1 DAYS)
4. STA 124+83.24L to 127+87.28L - BTV\_1-2" CONDUIT (3 DAYS)
5. STA 127+87.28L - CATV PEDESTAL (.5 DAYS)

### **AERIAL FACILITIES - TO REMOVE - 8 DAYS**

1. STA 116+91.24R to 121+86.23R - OTV/ATTACHED TO WOOD POLE (2 DAYS)
2. STA 121+30.23R to 121+30.33L - OTV/ATTACHED TO WOOD POLE (1 DAY)
3. STA 121+86.23R - WOOD CATV POLE (1 DAY)
4. STA 131+26.41R to 131+26.31L - OTV/ATTACHED TO WOOD POLE (1 DAYS)
5. STA 131+26.41R to 131+64.48R - OTV/ATTACHED TO WOOD POLE (1 DAYS)
6. STA 132+10.54R to 132+86.28L - OTV/ATTACHED TO WOOD POLE (1 DAYS)
7. STA 132+86.28L to 134+52.19L - OTV/ATTACHED TO WOOD POLE (1 DAYS)

### **BURIED FACILITIES - PROPOSED - 21 DAYS**

1. STA 116+91.24R to 119+82.41R - BTV/BFO\_3-2" CONDUITS (2 DAYS)
2. STA 119+82.41R - PULL BOX (1 DAYS)
3. STA 119+82.41R to EXIT R/W TO EAST - BTV\_1-2" CONDUIT (1 DAYS)
4. STA 119+82.41R to 119+82.56L - BTV\_2-2" CONDUITS (2 DAYS)

5. STA 119+82.56L to 120+21.56L - BTV\_2-2" CONDUITS (2 DAYS)
6. STA 120+21.56L - 10" CATV PEDESTAL (1 DAYS)
7. STA 119+82.41R to 121+10.44R - BTV\_4-2" CONDUITS (2 DAYS)
8. STA 121+10.44R to 121+26.62R - BTV\_4-2" CONDUITS (1 DAYS)
9. STA 124+88.70R to 124+88.41L - BTV\_2-2" CONDUITS (2 DAYS)
10. STA 124+88.41L to 125+06.40L - BTV\_2-2" CONDUITS (2 DAYS)
11. STA 125+06.40L - 10" CATV PEDESTAL (1 DAYS)
12. STA 125+06.40L to 127+86.39L - BTV\_1-2" CONDUIT (3 DAYS)
13. STA 127+86.39L - 10" CATV PEDESTAL (1 DAYS)

#### **AERIAL FACILITIES - PROPOSED - 6**

1. STA 131+26.31L to 131+64.48R - OTV/ATTACHED TO WOOD POLE (1 DAYS)
2. STA 131+51.52R – PROPOSED NEW BRIGHTHOUSE WOOD POLE
3. STA 131+52.52R to 132+75.33L - OTV/ATTACHED TO WOOD POLE (1 DAYS)
4. STA 131+64.48R to 132+10.54R - OTV/ATTACHED TO WOOD POLE (1 DAYS)
5. STA 132+75.33L to 132+85.30L - OTV/ATTACHED TO WOOD POLE (1 DAYS)
6. STA 132+85.30L to 134+60.22L - OTV/ATTACHED TO WOOD POLE (2 DAYS)

#### **Special Conditions and Constraints**

1. BRIGHTHOUSE / Charter/Spectrum will install Overhead facilities to new poles once BE & OE TECO circuits are installed and activated.
2. BRIGHTHOUSE / CHARTER / SPECTRUM will remove cables from old pole(s) once new Charter/Spectrum cables have spliced and activated, TECO has removed their Overhead Lines and poles have been topped.
3. BRIGHTHOUSE / Charter/Spectrum will activate new facilities during the hours of 12am-6am Mon-Thur.
4. BRIGHTHOUSE / Charter/Spectrum requires 1 week notice to schedule planned fiber outages, and 72 hrs. for coaxial outage. Utility work is based on a 5 day work week.
5. County holidays and rain/weather days have not been incorporated into the construction time.
6. BRIGHTHOUSE / Charter/Spectrum will attempt to remove all buried facilities once new facilities have been spliced and activated. In the case buried facilities cannot be removed: If possible, all cables will be removed from pipes, stub pipes will be placed at the beginning to end of abandoned facilities and labeled.
7. BRIGHTHOUSE / Charter/Spectrum will submit permits once approved URS has been returned.
8. BRIGHTHOUSE / Charter/Spectrum will start relocation of facilities once permits have been approved.

**After Hours Emergency Phone #: 844-220-2369**

**CITY OF TAMPA  
UTILITY RELOCATION SCHEDULE**

<b>Page 1 of 2</b>	<b>CIP NO.</b>	<b>PROJECT NAME</b>	<b>PROJECT NO.</b>
	12D00057	Armenia Ave at SR 580/Busch Blvd from Just S. of Humphrey St. to the Intersection of Sewaha St.	437044-1-54-01

**THIS FORM TO BE INCLUDED IN CONSTRUCTION CONTRACT DOCUMENTS**

Agency/Owner Crown Castle Fiber

Facilities Involved (Detail as to type and location of adjustments and relocations.):  
SEE PAGE 2

**Anticipated Construction Relocation Schedule**

(Describe each phase and all work that can be done concurrently during each phase in relation to a construction activity.):

**\*Working Days  
Estimated**

<b>Phase 1</b>	<u>See Page 2</u> Please contact Mike Pitts 48 hours prior to digging	
	<b>Total Phase 1</b>	<b>4 DAYS</b>
<b>Phase 2</b>	<u>(a)</u>	
	<b>Total Phase 2</b>	<b>0 DAYS</b>
<b>Phase 3</b>	<u>(a)</u>	
	<b>Total Phase 3</b>	<b>0 DAYS</b>
<b>Phase 4</b>	<u>(a)</u>	
	<b>Total Phase 4</b>	
	<b>Total Construction Working Days</b> (including page 2 If Applicable)	<b>4 DAYS</b>

**Preconstruction Items**

(Explain Preliminary engineering, material procurement, R/W acquisition, contract negotiations, etc.)

Material Procurement (poles) **0 DAYS**

**Total Preconstruction Days**  
(including page 2 If Applicable) **4 DAYS**

\* Individual phases may be spread throughout the contract with begin and end dates as necessary to coordinate construction activities with the City of Tampa contractor and other utilities. The Agency/Owner shall cooperate with the City of Tampa contractor to include their adjustment/relocation work progress schedule prior to the preconstruction conference.

The above data is based on construction plans DATED 3/13/2020.

This AGENCY/OWNER is not responsible for circumstances beyond its normal control. However, the AGENCY/OWNER agrees to fully cooperate with the City of Tampa, and their Contractor, in abiding by the "Utility Coordination Procedures" and completing the project as expeditiously as possible. The AGENCY'S/OWNER'S field representatives can be contacted at:

**Mike Pitts -Construction Manager** Telephone Number: (404) 246-5550

SUBMITTED FOR THE AGENCY BY: \_\_\_\_\_ Date 5/12/2020

(name-Title)

Venecia R. Horne -Operations Manager

APPROVAL BY: Derek Gil, P.E. Date 5/12/2020

Engineer of Record

Nina Mabileau, E.I. Nina Mabileau Date 9/11/2020

City of Tampa Project Manager

Date

CITY OF TAMPA

UTILITY RELOCATION SCHEDULE

Page 2 of 2

CIP NO.	PROJECT NAME	PROJECT NO.
12D00057	Armenia Ave at SR 580/Busch Blvd from Just S. of Humphrey St. to the Intersection of Sewaha St.	437044-1-54-01

**THIS FORM TO BE INCLUDED IN CONSTRUCTION CONTRACT DOCUMENTS**

Agency/Owner:

Facilities Involved (Continuation)

Busch Blvd-Sta 164+00 to 168+00 44' RT to 43'LT Crown Castle located within the Verizon 16-1.5" HPDE Joint Duct/to remain  
 Busch Blvd-Sta 168+00 43 LT Crown Castle located within the Verizon 8x1.5 HPDE Joint Duct/PROTECT IN PLACE  
 Armenia Ave-Sta 118+00 to 121+30 43' RT- Crown Castle (1)1-1/4" HPDE Duct/to remain

Anticipated Construction Schedule (Continuation)  
 (Additional Phases or Continuation of a Phase)

Working Days  
Estimated

4 Anticipated working days during construction to protect in place at Sta 168+00

Total Working Days

4 DAYS

Preconstruction Items (Continuation)

Total Days

Special Notations

On Busch Blvd, Crown Castle is within the Verizon duct bank. We will follow Verizon's lead.

On Armenia Ave Crown Castle has one duct that turns south on Okaloosa Ave and continues to Albany Ave. Please contact Mike Pitts 404/246-5550 with any questions or concerns during construction.

**UTILITY RELOCATION SCHEDULE**

CIP NO.	PROJECT NAME	PROJECT NO.
0000005 / 12D57	Armenia Ave. at SR 580/Busch Blvd from Just S. of Humphrey St. to the Intersection of Sewaha St.	437044-1-54-01

THIS FORM TO BE INCLUDED IN ROADWAY PROJECT CONTRACT DOCUMENTS

Agency/Owner: FRONTIER COMMUNICATIONS

Facilities Involved (Detail as to type and location of adjustments and relocations):  
 \_\_\_\_\_  
 \_\_\_\_\_

Anticipated Construction Relocation Schedule  
 (Describe each phase and all work that can be done concurrently during each phase in relation to a construction activity.):

Phase 1 (a)		*Working Days <u>Estimated</u>
_____		
_____		
Total Phase 1		

Phase 2 (a)		
_____		
_____		
Total Phase 2		

Phase 3 (a)		
_____		
_____		
Total Phase 3		

Phase 4 (a)		
_____		
_____		
Total Phase 4		

Total Construction Working Days 20

Preconstruction Items

(Explain: Preliminary engineering, material procurement, R/W acquisition, contract negotiations, etc.)

APPROVAL AND MATERIAL PROCUREMENT (30DAYS) \_\_\_\_\_  
 PRECONSTRUCTION WORK (48 DAYS) \_\_\_\_\_

Total Preconstruction Days 78

\*Individual phases may be spread throughout the contract with begin and end dates as necessary to coordinate construction activities with the CITY contractor and other utilities. The Agency/Owner shall cooperate with the CITY's contractor to include their adjustment/relocation work progress schedule prior to the preconstruction conference.

The above date is based on construction plans DATED 09/24/2018.  
 This AGENCY/OWNER is not responsible for circumstances beyond its normal control. However, the AGENCY/OWNER agrees to fully cooperate with the CITY, and its Contractor, in abiding by the "Utility Coordination Procedures" and completing the project as expeditiously as possible. The AGENCY'S/OWNER'S field representative can be contacted at:

Paul Linberry	Telephone Number: 813-838-8867
SUBMITTED FOR THE AGENCY BY: <u>Kami Ching</u>	Date <u>03/05/2019</u>
Kraivuth Choeykrajang; ENGR Network SR	
APPROVAL BY: <u>Paul Linberry</u>	Date 12/19/19
<u>Nina Mabillean</u>	Date <u>9/11/2020</u>
Engineer of Record NINA MABILLEAN, E.I. City Project Manager	

UTILITY RELOCATION SCHEDULE

1	FTR 2-FOC STA 116+20 16' LT TO STA 116+95 16' LT	TO REMAIN	NA	NA	0
2	FTR FOC STA 116+95 16' LT TO STA 116+95 50' LT	TO REMAIN	NA	NA	0
3	FTR HAND HOLE STA 119+95 16' LT	TO BE REPLACED WITH LOAD BEARING HH	PERMIT ACQUIRED	PRIOR TO CONSTRUCTION	1
4	FTR PROPOSED 1-1 1/4" DUCT W/FOC ST 119+95 16' LT TO STA 119+95 36' LT	TO BE PLACED	PERMIT ACQUIRED	PRIOR TO CONSTRUCTION	1
5	FTR PROPOSED 1-1 1/4" DUCT W/FOC STA 119+95 36' LT TO STA 120+40 36' LT	TO BE PLACED	PERMIT ACQUIRED AND ROW STAKED	PRIOR TO CONSTRUCTION	3
6	FTR PROPOSED 2'X3' HAND HOLE STA 120+40 36' LT	TO BE PLACED	STAKING OF ROW	PRIOR TO CONSTRUCTION	1
7	FTR PROPOSED 1-1 1/4" DUCT W/FOC STA 120+40 36' LT TO STA 120+60 36' LT	TO BE PLACED	PERMIT ACQUIRED AND ROW STAKED	PRIOR TO CONSTRUCTION	2
8	FTR FOC STA 119+95 16' LT TO STA 120+40 16' LT	TO BE REMOVED	SPlicing COMPLETE	PRIOR TO CONSTRUCTION	1
9	FTR HAND HOLE STA 120+40 4' LT	TO BE REMOVED	CABLE REMOVAL	PRIOR TO CONSTRUCTION	1
10	FTR FOC STA 120+40 4' LT TO STA 120+60 1' LT	TO BE REMOVED	SPlicing COMPLETE	PRIOR TO CONSTRUCTION	1
11	FTR 1-1/4" DUCT W/FOC STA 120+40+36 LT TO STA 120+15 325' LT	TO BE PLACED	PERMIT ACQUIRED	PRIOR TO CONSTRUCTION	1
12	FTR BT STA 119+81 27' LT TO STA 119+81 115' LT	TO REMAIN	NA	NA	0
13	FTR BT STA 119+81 27' LT TO STA 120+20 47' LT	TO REMAIN	NA	NA	0
14	FTR 2-BT STA 116+95 34' RT TO STA 119+67 37' RT	TO BE REMOVED	SPlicing COMPLETE	PRIOR TO CONSTRUCTION	2



UTILITY RELOCATION SCHEDULE

15	FTR PROPOSED 1-4" DUCT W/BT STA 116+95 38' RT TO STA 119+67 38' RT	TO BE PLACED	PERMIT ACQUIRED	PRIOR TO CONSTRUCTION	2
16	FTR 2-BT STA 119+70 35' RT TO STA 120+60 20' RT	TO BE REMOVED	SPlicing COMPLETE	PRIOR TO CONSTRUCTION	2
17	FTR PROPOSED BT STA 119+67 38' RT TO STA 120+20 38' RT	TO BE PLACED	PERMIT ACQUIRED	PRIOR TO CONSTRUCTION	1
18	FTR PROPOSED 1-4" DUCT W/BT STA 120+20 38' RT TO STA 120+20 47' LT	TO BE PLACED	PERMIT ACQUIRED	PRIOR TO CONSTRUCTION	2
19	FTR AERIAL CABLE STA 119+81 36' RT TO STA 119+81 30' LT	TO REMAIN	NA	NA	0
20	FTR PROPOSED 1-4" DUCT W/BT STA 119+67 38' RT TO STA 120+60 38' RT	TO BE PLACED	PERMIT ACQUIRED	PRIOR TO CONSTRUCTION	2
21	FTR BT STA 119+70 38' RT TO STA 120+19 33' RT	TO BE REMOVED	SPlicing COMPLETE	PRIOR TO CONSTRUCTION	1
22	FTR 4" BIP W/BT STA 120+19 35' RT TO STA 120+19 35' LT	CABLE TO BE REMOVED AND BIP FILLED WITH GROUT	SPlicing COMPLETE	PRIOR TO CONSTRUCTION	3
23	FTR 2BT STA 120+20 47' LT TO STA 120+15 115' LT	TO REMAIN	NA	NA	0
24	FTR FOC STA 120+40 4' LT TO STA 120+15 325' LT	TO BE REMOVED	SPlicing COMPLETE	PRIOR TO CONSTRUCTION	1
25	FTR 1-1/4" DUCT W/FOC STA 120+40 36' LT TO STA 120+15 325' LT	TO BE PLACED	PERMIT ACQUIRED	PRIOR TO CONSTRUCTION	2
26	FTR BT STA 119+67 35' RT TO STA 119+67 80' RT	TO REMAIN	NA	NA	0
27	FTR BT STA 119+80 35' RT TO STA 119=80 80' RT	TO REMAIN	NA	NA	0
28	FTR PROPOSED 2'X3' HAND HOLE STA 125+83 43' LT	TO BE PLACED	PERMIT ACQUIRED	PRIOR TO CONSTRUCTION	1



UTILITY RELOCATION SCHEDULE

29	FTR PROPOSED 1-1/4" DUCT W/FOC STA 120+60 36' LT TO STA 125+83 30' LT	TO BE PLACED	PERMIT ACQUIRED	PRIOR TO CONSTRUCTION	2
30	FTR FOC STA 120+60 17' LT TO STA 125+00 13' LT	TO BE REMOVED	SPLICING COMPLETE	PRIOR TO CONSTRUCTION	1
31	FTR FOC STA 125+00 13' LT TO STA 125+80 17' LT	TO BE REMOVED	SPLICING COMPLETE	PRIOR TO CONSTRUCTION	1
32	FTR FOC STA 125+80 17' LT TO STA 125+93 30' LT	TO BE REMOVED	SPLICING COMPLETE	PRIOR TO CONSTRUCTION	1
33	FTR HAND HOLE STA 125+93 30' LT	TO BE REMOVED	SPLICING COMPLETE	PRIOR TO CONSTRUCTION	1
34	FTR BT STA 120+60 21' RT TO STA 121+23 21' RT	TO BE REMOVED	SPLICING COMPLETE	PRIOR TO CONSTRUCTION	1
35	FTR BT STA 120+60 23' RT TO STA 120+96 23' RT	TO BE REMOVED	SPLICING COMPLETE	PRIOR TO CONSTRUCTION	1
36	FTR BT STA 120+96 23' RT TO STA 121+00 31' RT	TO BE REMOVED	SPLICING COMPLETE	PRIOR TO CONSTRUCTION	1
37	FTR BT STA 121+00 31' RT TO STA 121+27 35' RT	TO BE REMOVED	SPLICING COMPLETE	PRIOR TO CONSTRUCTION	1
38	FTR BT STA 121+23 21' RT TO STA 121+27 35' RT	TO BE REMOVED	SPLICING COMPLETE	PRIOR TO CONSTRUCTION	1
39	FTR 2-BT STA 121+27 35' RT TO STA 121+35 50' RT	TO BE REMOVED	SPLICING COMPLETE	PRIOR TO CONSTRUCTION	1
40	FTR 2-BT STA 121+35 50' RT TO STA 121+88 53' RT	TO BE REMOVED	SPLICING COMPLETE	PRIOR TO CONSTRUCTION	1
41	FTR PROPOSED 1-4" DUCT W/BT STA 120+60 38' RT TO STA 121+00 38' RT	TO BE PLACED	PERMIT ACQUIRED	PRIOR TO CONSTRUCTION	1
42	FTR PROPOSED 1-4" DUCT W/BT STA 121+00 38' RT TO STA 121+35 55' RT	TO BE PLACED	PERMIT ACQUIRED	PRIOR TO CONSTRUCTION	1

UTILITY RELOCATION SCHEDULE

43	FTR PROPOSED 1-4" DUCT W/BT STA 121+35 55' RT TO STA 121+68 54' RT	TO BE PLACED	PERMIT ACQUIRED	PRIOR TO CONSTRUCTION	2
44	FTR BT STA 121+67 120' RT TO STA 121+67 50' RT	TO REMAIN	NA	NA	0
45	FTR PED STA 121+67 50' RT	TO REMAIN	NA	NA	0
46	FTR BT STA 121+67 50' RT TO STA 123+87 42' RT	TO REMAIN	NA	NA	0
47	FTR BT STA 123+87 42' RT TO STA 123+88 38' LT	TO REMAIN	NA	NA	0
48	FTR BT STA 123+88 38' LT TO STA 124+15 38' LT	TO REMAIN	NA	NA	0
49	FTR BT STA 124+15 38' LT TO STA 124+25 38' LT	HOLD, GUARD AND PROTECT DURING PLACEMENT OF DRAINAGE STRUCTURE	PLACING OF DRAINAGE STRUCTURE	DURING CONSTRUCTION	2
50	FTR BT STA 124+25 38' LT TO STA 126+20 43' LT	TO REMAIN	NA	NA	0
51	FTR PED STA 125+92	RELOCATE TO REAR OF NEW SIDEWALK	STAKING OF SIDEWALK	DURING CONSTRUCTION	1
52	FTR BT STA 126+20 43' LT TO STA 127+87 43' LT	TO REMAIN	NA	NA	0
53	FTR PED STA 127+87 43' LT	RELOCATE TO REAR OF NEW SIDEWALK	STAKING OF SIDEWALK	DURING CONSTRUCTION	1
54	FTR POLE STA 127+87 26' LT	TO BE REMOVED	MOVEMENT OF PED	DURING CONSTRUCTION	1
55	FTR AERIAL DROP STA 127+87 26' LT TO STA 127+70 80' LT	TO BE REMOVED	MOVEMENT OF PED	DURING CONSTRUCTION	1
56	FTR PROPOSED BURIED DROP STA 127+87 40' LT TO STA 127+70 80' LT	TO BE PLACED	MOVEMENT OF PED	DURING CONSTRUCTION	1
57	FTR HAND HOLE STA 130+07 72' LT	TO REMAIN	NA	NA	0
58	FTR 3-4" DUCTS W/BT STA 130+07 72' LT TO STA 130=37 40' RT	TO REMAIN	NA	NA	0

UTILITY RELOCATION SCHEDULE

59	FTR 1-4" DUCTS W/FOC STA 130+16 40' RT	ADJUST AND PROTECT FOR NEW DRAIN PIPE AND SIGN	PLACEMENT OF PIPE AND SIGN	DURING CONSTRUCTION	2
60	FTR 3-4" DUCTS W/BT STA 130+37 40' RT TO STA 131+20 46' RT	TO REMAIN	NA	NA	0
61	FTR 1-4" DUCT W/FOC STA 130+07 72' LT TO STA 130+17 40' RT	TO REMAIN	NA	NA	0
62	FTR FOC STA 130+09 52.81' LT	TO BE ADJUSTED FOR NEW SIGNAL POLE	STAKING OF POLE	DURING CONSTRUCTION	2
63	FTR 1-4" DUCT W/FOC STA 130+17 40' RT TO STA 131+20 46' RT	TO REMAIN	NA	NA	0
64	FTR 2-BT STA 130+15 50' LT TO STA 130+26 80' LT	TO REMAIN	NA	NA	0
65	FTR PED STA 130+15 50' LT	TO REMAIN	NA	NA	0
66	FTR PED STA 131+27 32' LT	TO REMAIN	NA	NA	0
67	FTR BT STA 131+27 32' LT TO STA 132+93 25' LT	TO REMAIN	NA	NA	0
68	FTR PED STA 132+93 25' LT	TO REMAIN	NA	NA	0
69	FTR BT STA 131+67 27' LT TO STA 131+74 50' RT	TO REMAIN	NA	NA	0
70	FTR 4-4" DUCTS W/BT STA 131+20 46' RT TO STA 131+74 50' RT	TO REMAIN	NA	NA	0
71	FTR 8-4" DUCTS W/FOC & BT STA 131+74 50' RT TO STA 131+77 82' RT	TO REMAIN	NA	NA	0
72	FTR MAN HOLE STA 131+77 82' RT TO STA 131+77 94' RT	TO REMAIN	NA	NA	0
73	FTR 5-4" DUCTS W/FOC & BT STA 131+77 94' RT TO STA 131+77 140' RT	TO REMAIN	NA	NA	0
74	FTR 8-4" DUCTS W/ FOC & BT STA 131+74 50' RT TO STA 132+50 30' RT	TO REMAIN	NA	NA	0

UTILITY RELOCATION SCHEDULE

75	FTR 6-4" DUCTS W/FOC & BT STA 132+50 30' RT	TO BE ADJUSTED 2' LOWER FOR NEW DRAIN PIPE	MARKING OF PIPE RUNNING LINE	DURING CONSTRUCTION	5
76	FTR 6-4" DUCTS W/FOC & BT STA 132+50 30' RT TO STA 132+87 26' RT	TO REMAIN	NA	NA	0
77	FTR 6-4" DUCTS W/FOC & BT STA 132+87 26' RT TO STA 133+49 10' LT	TO REMAIN	NA	NA	0
78	FTR 6-4" DUCTS W/FOC & BT STA 133+49 10' LT TO STA 133+95 23' LT	TO REMAIN	NA	NA	0
79	FTR 6-4" DUCTS W/FOC & BT STA 133+95 23' LT TO STA 134+45 28' LT	TO REMAIN	NA	NA	0
80	FTR 6-4" DUCTS W/FOC & BT STA 134+45 28' LT TO STA 135+55 59' LT	TO REMAIN	NA	NA	0
81	FTR 6-4" DUCTS W/FOC & BT STA 135+55 59' LT TO STA 135+95 68' LT	TO REMAIN	NA	NA	0
82	FTR MAN HOLE STA 135+95 68' LT TO STA 136+05 71' LT	TO REMAIN	NA	NA	0
83	FTR 2-4" DUCTS W/ BT STA 132+50 30' RT TO STA 133+40 45' RT	TO BE ADJUSTED HIGHER TO CLEAR NEW DRAIN PIPE	MARKING OF PIPE RUNNING LINE	DURING CONSTRUCTION	4
84	FTR 2-4" DUCTS W/BT STA 133+40 45' RT TO STA 134+80 27' RT	TO REMAIN	NA	NA	0
85	FTR BT STA 134+80 27' RT TO STA 135+00 54' RT	TO REMAIN	NA	NA	0
86	FTR 2-4" DUCTS W/BT STA 134+80 27' RT TO STA 136+00 28' RT	TO REMAIN	NA	NA	0
87	FTR FOC STA 136+00 35' RT TP STA 135+62 33' RT	TO REMAIN	NA	NA	0
88	FTR FOC STA 135+62 33' RT TO	TO REMAIN	NA	NA	0

UTILITY RELOCATION SCHEDULE

	STA 135+47 70' RT				
89	FTR FOC STA 135+47 70' RT TO STA 135+58 90' RT	TO REMAIN	NA	NA	0
90	FTR 2-BT STA 165+00 75' LT TO STA 167+70 75' LT	TO REMAIN	NA	NA	0
91	FTR 1-4" DUCT STA 165+00 51' LT TO STA 167+70 51' LT	TO REMAIN	NA	NA	0
92	FTR BT STA 166+10 51' LT TO STA 166+70 70' LT	TO REMAIN	NA	NA	0
93	FTR POLE STA 166+70 70' LT	TO REMAIN	NA	NA	0
94	FTR PED STA 166+70 70' LT	TO REMAIN	NA	NA	0
95	FTR HAND HOLE STA 166+10 51' LT	TO REMAIN	NA	NA	0
96	FTR 1-4" DUCT W/ FOC STA 167+70 51' LT TO STA 167+85 51' LT	TO REMAIN	NA	NA	0
97	FTR HAND HOLE STA 167+85 51' LT TO STA 167+90 51' LT	TO REMAIN	NA	NA	0
98	FTR 1-4" DUCT W/FOC STA 167+90 51' LT TO STA 168+95 83' LT	TO REMAIN	NA	NA	0
99	FTR 1-4" DUCT W/FOC STA 168+95 83' LT TO STA 130+60 44' RT	TO REMAIN	NA	NA	0
100	FTR 2-BT STA 167+70 75' LT TO STA 168+05 65' LT	TO REMAIN	NA	NA	0
101	FTR 3-4" DUCTS W/BT STA 168+05 65' LT TO STA 168+97 103' LT	TO REMAIN	NA	NA	0
102	FTR 3-4" DUCTS W/BT STA 168+97 103' LT TO STA 130+60 48' RT	TO REMAIN	NA	NA	0



**CITY OF TAMPA  
UTILITY RELOCATION SCHEDULE**

Page 1 of 2

<b>CIP NO.</b>	<b>PROJECT NAME</b>	<b>PROJECT NO.</b>
12 D-00057	Armenia Ave Intersection Project at SR 580	0000005

**THIS FORM TO BE INCLUDED IN CONSTRUCTION CONTRACT DOCUMENTS**

**Agency/Owner**      Verizon (formerly XO Communications and MCI)

**Facilities Involved (Detail as to type and location of adjustments and relocations.):**  
SEE PAGE 2

<b>Anticipated Construction Relocation Schedule</b>		<b>*Working Days Estimated</b>
<i>(Describe each phase and all work that can be done concurrently during each phase in relation to a construction activity.):</i>		
<b>Phase 1</b>	<u>See Page 2</u> Please contact James Barra of Verizon at 813-928-9881 48 hours prior to digging.	<b>During Construction</b> <b>4DAYS</b>
	<b>Total Phase 1</b>	
<b>Phase 2</b>	(a)	
	<b>Total Phase 2</b>	<b>0 DAYS</b>
<b>Phase 3</b>	(a)	
	<b>Total Phase 3</b>	<b>0 DAYS</b>
<b>Phase 4</b>	(a)	
	<b>Total Phase 4</b>	
	<b>Total Construction Working Days</b> <i>(including page 2 If Applicable)</i>	

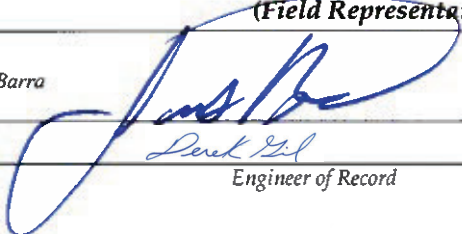
<b>Preconstruction Items</b>	<i>(Explain Preliminary engineering, material procurement, R/W acquisition, contract negotiations, etc.)</i>	
	<b>Material Procurement (poles)</b>	<b>0 DAYS</b>
	<b>Total Preconstruction Days</b> <i>(including page 2 If Applicable)</i>	<b>4 DAYS</b>

\* Individual phases may be spread throughout the contract with begin and end dates as necessary to coordinate construction activities with the City of Tampa contractor and other utilities. The Agency/Owner shall cooperate with the City of Tampa contractor to include their adjustment/relocation work progress schedule prior to the preconstruction conference.

The above data is based on construction plans DATED \_\_\_\_\_.

This AGENCY/OWNER is not responsible for circumstances beyond its normal control. However, the AGENCY/OWNER agrees to fully cooperate with the City of Tampa, and their Contractor, in abiding by the "Utility Coordination Procedures" and completing the project as expeditiously as possible. The AGENCY'S/OWNER'S field representatives can be contacted at:

**(Field Representative)      Telephone Number:**

SUBMITTED FOR THE AGENCY BY:	<u>James Barra</u>	Date	<u>813-928-9881</u>
			<u>12-18-2019</u>
APPROVAL BY:	<u>Derek Gil</u>	Date	<u>12/19/19</u>
	Engineer of Record		

Nina Matilleau

9/11/2020

City of Tampa Project Manager

Date

Page 2 of 2

**CITY OF TAMPA  
UTILITY RELOCATION SCHEDULE**

CIP NO.	PROJECT NAME	PROJECT NO.
12 D-00057	Armenia Ave Intersection Project at SR 580	0000005

***THIS FORM TO BE INCLUDED IN CONSTRUCTION CONTRACT DOCUMENTS***

Agency/Owner:

**Facilities Involved (Continuation)**

Sta 164+00 to 168+00 44' RT to 43' LT Verizon 8x1.5" hdpe to remain in place  
 Sta 168+00 43' LT Verizon 8x1.5" hdpe PROTECT IN PLACE  
 Sta 168+00 to 171+56 43' LT to 45' RT Verizon 8x1.5" hdpe to remain in place  
 Sta 164+00 to 171+56 Verizon in CSX R/W hdpe to remain in place

Sta 164+00 to 168+40 59' to 54' LT Verizon 6x1.5" hdpe to remain in place  
 Sta 129+37 to 136+00 30' LT Verizon 6x1.5" hdpe to remain in place

**Anticipated Construction Schedule (Continuation)**  
(Additional Phases or Continuation of a Phase)

**Working Days**  
**Estimated**

4 Anticipated working days during construction to protect in place at Sta 168+00

**Total Working Days**

**4**

**Preconstruction Items (Continuation)**

**Total Days**

**Special Notations**

Contact James Barra of Verizon at 813-928-9881 48 hours in advance of work performed at Sta 168+00 to protect facilities in place.

**CITY OF TAMPA**

**UTILITY RELOCATION SCHEDULE**

Page 1 of 2

<b>CIP NO.</b>	<b>PROJECT NAME</b>	<b>PROJECT NO.</b>
12-D-00057	Armenia Ave at SR 580/Busch Boulevard	437044-1-54-01

***THIS FORM TO BE INCLUDED IN CONSTRUCTION CONTRACT DOCUMENTS***

<b>Agency/Owner</b>	TECO PEOPLES GAS
---------------------	------------------

***Facilities Involved (Detail as to type and location of adjustments and relocations.):***  
SEE PAGE 2

**Anticipated Construction Relocation Schedule**

(Describe each phase and all work that can be done concurrently during each phase in relation to a construction activity.):

**\*Working Days Estimated**

**Phase 1** See Page 2

**Total Phase 1**

**15**

**Phase 2** (a)

**Total Phase 2**

**Phase 3** (a)

**Total Phase 3**

**Phase 4** (a)

**Total Phase 4**

**Total Construction Working Days**

**15**

*(including page 2 If Applicable)*

**Preconstruction Items**

*(Explain Preliminary engineering, material procurement, R/W acquisition, contract negotiations, etc.)*

**Permitting and Scheduling**

**Total Preconstruction Days**

**DAYS 90**

*(including page 2 If Applicable)*

*\* Individual phases may be spread throughout the contract with begin and end dates as necessary to coordinate construction activities with the CITY OF TAMPA contractor and other utilities. The Agency/Owner shall cooperate with the CITY OF TAMPA " contractor to include their adjustment/relocation work progress schedule prior to the preconstruction conference.*

**TOTAL WORKING DAYS**

**DAYS 105**

*The above data is based on construction plans DATED 9/24/2018.*

*This AGENCY/OWNER is not responsible for circumstances beyond its normal control. However, the AGENCY/OWNER agrees to fully cooperate with the COUNTY, and its Contractor, in abiding by the "Utility Coordination Procedures" and completing the project as expeditiously as possible. The AGENCY'S/OWNER'S field representatives can be contacted at:*

**Mark Byrd**

**Telephone Number:**

**813-275-3788**

SUBMITTED FOR THE AGENCY BY: James Hamilton  
Gas Design Technician II



Digitally signed by James Hamilton  
Date: 2019.09.20 14:10:18 -04'00'

Date

Sept. 20, 2019

APPROVAL BY:

*Derek Gil*

Date

12/19/19

Engineer of Record

*Nina Matrillean*

9/11/2020

County Project Manager

Date



CITY OF TAMPA UTILITY RELOCATION SCHEDULE		
Page 2 of 2		
CIP NO.	PROJECT NAME	PROJECT NO.
12-D-00057	Armenia Ave at SR 580/Busch Boulevard	437044-1-54-01
<b><i>THIS FORM TO BE INCLUDED IN CONSTRUCTION CONTRACT DOCUMENTS</i></b>		
<i>Agency/Owner:</i>	TECO PEOPLES GAS	
	<u><i>Facilities Involved (Continuation)</i></u>  <i>See description on utility work sheet</i>	
	<u><i>Anticipated Construction Schedule (Continuation)</i></u> <i>(Additional Phases or Continuation of a Phase)</i>	<u><i>Working Days</i></u> <u><i>Estimated</i></u>  DAYS
	<u><i>Total Working Days</i></u>	DAYS
	<u><i>Preconstruction Items (Continuation)</i></u>  <i>Material Procurement, coordination with existing customers, Sunshine One Call, etc...</i>	
		<i>Total Days</i>

**CITY OF TAMPA  
UTILITY RELOCATION SCHEDULE**

CIP NO.	PROJECT NAME	PROJECT NO.
12-D-00057	Armenia Ave at SR 580/Busch Boulevard	437044-1-54-01

Special Notations

1. THE TECO PEOPLES GAS 24-HOUR EMERGENCY NUMBER 1-877 TECO PGS (1-877-832-6747).
2. TECO PEOPLES GAS CREW AVAILABILITY MAY BE AFFECTED OR LIMITED DUE TO OUR REQUIRED RESPONSE TO EMERGENCY CONDITIONS ELSEWHERE. THIS LIMITATION WILL BE DEPENDENT UPON THE SEVERITY AND LOCATION OF THE EMERGENCY.
3. TECO PEOPLES GAS SUBCONTRACTORS NORMAL WORK SCHEDULE IS MONDAY THROUGH FRIDAY FROM 8 A.M. TO 5 P.M., EXCLUDING TECO PEOPLES GAS OBSERVED HOLIDAY'S (NEW YEARS DAY, GOOD FRIDAY, MEMORIAL DAY, JULY 4TH, LABOR DAY, THANKSGIVING DAY, THE FRIDAY AFTER THANKSGIVING DAY, CHRISTMAS EVE DAY AND CHRISTMAS DAY). ANY TECO PEOPLES GAS ASSISTANCE REQUESTED FROM THE FDOT, THEIR CONTRACTOR OR SUBCONTRACTOR OUTSIDE OF THESE NORMAL WORKING HOURS MUST BE SCHEDULED 48 HOURS IN ADVANCE. TECO PEOPLES GAS REQUIRES VERIFICATION THAT THE CREWS ARE STILL NEEDED ON THE ACTUAL WORKDAY (MONDAY THROUGH FRIDAY) THAT HAD PREVIOUSLY BEEN REQUESTED OR THE LAST BUSINESS DAY BEFORE THE REQUESTED WEEKEND OR HOLIDAY.
4. EXISTING GAS MAINS CANNOT BE TAKEN OUT OF SERVICE UNTIL NEW MAINS ARE INSPECTED, PRESSURE TESTED, AND IN SERVICE.
5. A COPY OF THE APPROVED CONTRACTOR'S CPM (CRITICAL PATH METHOD) IS REQUESTED WITHIN 5 DAYS OF APPROVAL.
6. TECO/PEOPLE GAS REQUEST THE FDOT OR ITS REPRESENTATIVE STAKE THE R/W PRIOR TO THE START OF THE GAS MAIN RELOCATION.
7. TECO/PEOPLES GAS MAY GROUT FILL AND RETIRE GAS MAINS THAT ARE UNDER PAVED ROADWAYS AND DRIVEWAYS AS AN ALTERNATIVE TO REMOVING THEM.
8. THE CONTRACTOR IS TO NOTIFY TECO/PEOPLES GAS, FIELD REPRESENTATIVE MARK BYRD (813) 275-3788, SEVEN DAYS PRIOR TO THE START OF CONSTRUCTION IN ORDER TO COORDINATE RESOLUTION IF ANY IMPACT TO GAS MAIN AND WORKING WITHIN FIVE (5) FEET OF ALL HIGH PRESSURE GAS MAINS, SO THAT A COMPANY REPRESENTATIVE CAN BE ON SITE DURING EXCAVATION.

**CITY OF TAMPA  
UTILITY RELOCATION SCHEDULE**

CIP NO.	PROJECT NAME	PROJECT NO.		
12-D-00057	Armenia Ave at SR 580/Busch Boulevard	437044-1-54-01		
Utility Facilities by Status/Type/Size/Material/Offset to Baseline from STA to STA	Description of Utility Work	Dependent Activities	M.O.T. Phase Number	Consecutive Calendar Days
STA. 120+19, 67' LT TO >100' LT EXISTING 2" CS GM (ON HUMPHREY ST)	TO REMAIN	N/A	N/A	0
STA. 120+18 67' LT EXISTING 2" CS GAS MAIN	TO BE CUT AND CAPPED	N/A	N/A	3
STA. 120+18, 66' LT TO STA. 127+40, 19' LT EXISTING 2" CS GAS MAIN	TO BE RETIRED AND REMOVED	CUTTING AND CAPPING OF EXISTING MAIN AT STA 120+18, 67' LT	N/A	12

UTILITY RELOCATION SCHEDULE

CIP NO.	PROJECT NAME	PROJECT NO.
0000005 / 12D57	Armenia Ave. at SR 580/Busch Blvd from Just S. of Humphrey St. to the Intersection of Sewaha St.	437044-1-54-01

**THIS FORM TO BE INCLUDED IN ROADWAY PROJECT CONTRACT DOCUMENTS**

Agency/Owner: Tampa Electric Company

Facilities Involved (Detail as to type and location of adjustments and relocations):  
69/13KV overhead electric pole line

Anticipated Construction Relocation Schedule  
(Describe each phase and all work that can be done concurrently during each phase in relation to a construction activity.):

	*Working Days	Estimated
<u>Phase 1 (a)</u>		
---- Install 69KV pole line from pole at Station (Sta) 117+30-28L to pole at Sta 165+15-30R including eight new poles at Sta 119+65-43L, Sta 121+72-44L, Sta 123+82-44L, Sta 125+92-44L, Sta 127+92-42L, Sta 128+57-42L, Sta 128+84-118R, and Sta 166+70-45R.	67	
---- Install 13KV pole line from pole at Sta 117+30-28L thru pole at Sta 132+85-29L including new nine poles at Sta 118+50-38L, Sta 121+30-44L, Sta 122+40-44L, Sta 126+60-42L, Sta 127+62-42L, Sta 130+80-34L, Sta 131+36-30L, Sta 132+85-29L, and Sta 170+60-32L.	25	
---- Install 13KV BE in 6" conduit from pole at Sta 126+60-42L to pole at Sta 130+80-34L	14	
---- Install 13KV BE in 6" conduit from pole at Sta 127+62-42L to pole at Sta 170+60-32L	14	
---- Install new street lights on new pole line and remove old street lights within project limits	14	
---- Install light and pole at Sta 123+80-52R, 127+01, 53R, 129+85-54R, 130+38-49R	4	
---- Install 120/240V O.E. from 123+82-44L to 123+80-52R and 126+60-42L to 127+01-53R and 128+84-118R to 129+85-54R and 129+85-54R to 130+38-49R	4	
<u>Total Phase 1</u>		<u>142</u>
<u>Phase 2 (a)</u>		
Remove 69KV overhead pole line from pole at Sta 117+30-28L to pole at Sta 165+15-30R	21	
Remove 13KV overhead pole line from pole at Sta 117+30-28L to pole at Sta 132+85-29L	21	
<u>Total Phase 2</u>		<u>42</u>
<u>Total Construction Working Days</u>		<u>184</u>

Preconstruction Items  
(Explain: Preliminary engineering, material procurement, R/W acquisition, contract negotiations, etc.)

224 days for preparing/securing CSX permit (20 wks) & scheduling CSX Flagger (12 wks)  
(168 days running consecutively with CSX permit for procuring of the steel transmission poles.)  
(144 days running consecutively with CSX permit for preparing/securing City of Tampa permit)

Total Preconstruction Days: 224

\*Individual phases may be spread throughout the contract with begin and end dates as necessary to coordinate construction activities with the CITY contractor and other utilities. The Agency/Owner shall cooperate with the CITY's contractor to include their adjustment/relocation work progress schedule prior to the preconstruction conference.

The above date is based on construction plans DATED 9-24-2018  
This AGENCY/OWNER is not responsible for circumstances beyond its normal control. However, the AGENCY/OWNER agrees to fully cooperate with the CITY, and its Contractor, in abiding by the "Utility Coordination Procedures" and completing the project as expeditiously as possible. The AGENCY'S/OWNER'S field representative can be contacted at:  
69KV-Mike Odom @813-635-1763, 13KV John Griffith @ 813-275-3005 Telephone Number: \_

SUBMITTED FOR THE AGENCY BY: Jason T. Payne Date 09/01/20  
Jason T. Payne, Construction Coordinator

APPROVAL BY: Derek Gil, P.E. Date 9/2/2020  
Engineer of Record

Nina S. Mabileau, E.I. Date 9/11/2020  
City Project Manager

**SPECIAL NOTATIONS**

1. **TEC (TAMPA ELECTRIC COMPANY) REQUIRES A MINIMUM OF 21 CALENDAR DAYS TO SCHEDULE ANY TEC WORK RELATED TO THIS PROJECT, INCLUDING BUT NOT LIMITED TO "DURING CONSTRUCTION" WORK IDENTIFIED IN THIS RELOCATION SCHEDULE, REQUESTS FOR THE INSTALLATION OF LINE COVER, REQUESTS FOR OVERHEAD/UNDERGROUND ELECTRIC OUTAGE(S), REQUESTS FOR TEC POLE HOLDING, AND/OR REQUESTS TO PROTECT ANY TEC FACILITIES WITH SAID REQUESTS BEING INITIATED BY HILLSBOROUGH COUNTY (HC), THE HC CONTRACTOR AND/OR THEIR SUBCONTRACTOR.**
2. **FOR SAFETY REASONS, TEC LINE CREWS SHALL NOT WORK IN ADVERSE WEATHER CONDITIONS.**
3. **THE TEC LINE CREW AVAILABILITY SHALL BE AFFECTED AND/OR LIMITED DUE TO OUR REQUIRED RESPONSE TO EMERGENCY CONDITIONS. THIS LIMITATION WILL BE DEPENDENT UPON THE SEVERITY OF THE EMERGENCY.**
4. **TEC AND/OR TEC'S SUBCONTRACTORS NORMAL WORK SCHEDULE IS MONDAY THROUGH FRIDAY FROM 8 A.M. TO 5 P.M., EXCLUDING TEC OBSERVED HOLIDAY'S WHICH INCLUDE NEW YEARS DAY, GOOD FRIDAY, MEMORIAL DAY, JULY 4TH, LABOR DAY, THANKSGIVING DAY, THE FRIDAY AFTER THANKSGIVING, CHRISTMAS EVE DAY AND CHRISTMAS DAY.**
5. **TEC CAN NOT REMOVE ANY TEC POLES THAT HAVE EXISTING JOINT USERS STILL ATTACHED. SUBSEQUENTLY, ALL JOINT USERS SUCH AS FRONTIER, BRIGHT HOUSE, TRAFFIC, ETC. MUST BE REMOVED BEFORE TEC CAN REMOVE THE POLE ITSELF.**
6. **IF TRANSMISSION OUTAGE IS REQUIRED, BELOW ARE THE RECOMMENDED SEASONAL OUTAGE TIMES FOR 69KV, 138KV AND 230KV:**
  - **JANUARY THROUGH MARCH: TYPICALLY NO OUTAGES FOR ANY VOLTAGE TRANSMISSION LINES WILL BE SCHEDULED DUE TO SYSTEM DEMANDS**
  - **APRIL THROUGH MAY: TYPICALL 69KV ELECTRIC LINES CAN BE SCHEDULED FOR CONSECUTIVE DAYTIME OR NIGHTTIME OUTAGES.**
  - **APRIL THROUGH MAY: TYPICALLY 138KV AND 230KV ELECTRIC LINES CAN BE SCHEDULED FOR NIGHTTIME OUTAGES ONLY.**
  - **JUNE THROUGH SEPTEMBER: WITH TEMPERATURES ABOVE 90 DEGREES, TYPICALLY NO OUTAGES WILL BE SCHEDULED DUE TO SYSTEM DEMANDS.**
  - **JUNE THROUGH SEPTEMBER: WITH TEMPERATURES BELOW 90 DEGREES, TYPICALLY 69KV ELECTRIC LINES CAN BE SCHEDULED AT NIGHT ONLY.**
  - **SEPTEMBER THROUGH DECEMBER: TYPICALLY 69KV ELECTRIC LINES CAN BE SCHEDULED FOR CONSECUTIVE DAYTIME OR NIGHTTIME OUTAGES.**
  - **SEPTEMBER THROUGH DECEMBER: TYPICALLY 138KV AND 230KV ELECTRIC LINES CAN BE USUALLY SCHEDULED FOR NIGHTTIME OUTAGES ONLY.**
7. **TECO'S RELOCATION WORK DAYS MAY BE AFFECTED BY GOVERNMENTAL RESTRICTIONS ON LANE CLOSURES DUE TO SAFETY AND/OR SCHEDULING CONCERNS SURROUNDING THE NORTH TAMPA ALTERNATIVE SCHOOL OR THE APARTMENT COMPLEX ACROSS FROM THE SCHOOL.**

**EMERGENCY NUMBER FOR NIGHTS, WEEKENDS & TECO HOLIDAYS - 877-588-1010**  
**PROJECT MANAGEMENT: ARLEE JONES 407-670-8633**  
**13KV DISTRIBUTION FACILITIES CONTACT: JOHN GRIFFITH @ 813-275-3005**  
**69KV TRANSMISSION FACILITIES CONTACT: MIKE ODOM @ 813-635-1763**