ADDENDUM TO
SOLICITATION DOCUMENTS

Posted Date: **May 21, 2014** Addendum No. **01**

Solicitation Title: **Northwest (NW) 2nd Avenue – Force Main Improvement Project**

Solicitation No.: **33-13-14 IFB** Opening Date: **Tuesday, June 3rd, 2014 at 3:00PM**

To All Respondents:

It is the Respondents' responsibility to assure receipt of all addenda, clarifications and inquiries regarding this Solicitation. The Respondent should verify with the designated Purchasing Agent prior to submitting a response, that all, if any, have been received. Respondents are required to acknowledge the number of addenda received as part of their response by checking the box indicated on the City Contract Form, A-5 Acknowledgement of Addendum(s).

This addendum is issued to modify the previously issued Solicitation documents and/or given for informational purposes, and is hereby made a part of the Solicitation documents.

Please find attach to this addendum an update Price Proposal Form and Attachment B 100% Specifications Bid Set for the above reference Solicitation.

*****All other items remain the same*****
End of Addendum

PRICE PROPOSAL FORM

NORTHWEST (NW) 2ND AVENUE –
FORCE MAIN IMPROVEMENT PROJECT
IFB NO. 33-13-14

The prices listed below shall include the total cost to complete the services including but not limited to materials, labor, equipment, bonds, insurances, etc, as necessary to ensure proper delivery of services and/or products requested by the City of North Miami.

Note: For a detailed description of each proposed item, refer to Section 01025 of the Specifications entitled *Measurement and Payment*.

Items	Description	Estimated Quantity	Unit	Price	Value
1.)	Mobilization, MOT, Bonds & Insurance	1	LS	_____	_____
2.)	Clearing and Grubbing	1	LS	_____	_____
3.)	Tree Removal	1	LS	_____	_____
4.)	Force main, 8” DIP, Open Cut	10	LF	_____	_____
5.)	Force main, 10” DIP, Open Cut	1600	LF	_____	_____
6.)	18” x 10” Tapping Sleeve and Valve	1	EA	_____	_____
7.)	8” x 8” Tapping Sleeve and Valve	1	EA	_____	_____
8.)	45 Degree Bends, 10” DIP	20	EA	_____	_____
9.)	Reducer, 10” x 8” DIP	1	EA	_____	_____
10.)	Plug Valve, 10”	1	EA	_____	_____
11.)	Automatic Air Release Valve Assembly, Wastewater Service	2	EA	_____	_____
12.)	Milling Existing Asphalt Pavement (minimum depth 1”)	4400	SY	_____	_____

13.)	Asphaltic Concrete Surface Course, Overlay Type SP-9.5 (fine mix) (minimum thickness 1”)	4400	SY	_____	_____
14.)	Adjust Utility Covers	1	LS	_____	_____
15.)	Pavement Markings	1	LS	_____	_____
16.)	Grout/Abandon Existing Force Main	1600	LF	_____	_____
17.)	Site restoration	1	LS	_____	_____
18.)	Allowance	1	LS	_____	_____

TOTAL PROPOSAL AMOUNT: _____

TOTAL PROPOSAL AMOUNT (IN WORDS)

_____

- The price listed in the Solicitation Price Form shall include the total cost to complete the Work including but not limited to materials, labor, equipment, bonds, insurances, etc, as necessary to ensure proper delivery and installation of the Project as requested by the City.
- Respondent, individual, partnership, corporation or association responding to this Solicitation certifies that all statements made in this document are true and correct to the best of their knowledge. Also the Respondent agree to hold this offer open for a period of one hundred and eighty (180) days from the deadline for receipt of Response.
- Respondent understand and agree to be bound by the conditions contained in this Solicitation and shall conform with all the requirements.

SECTION 01000

GENERAL REQUIREMENTS

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. Furnish all labor, equipment and materials to install a new 10-inch force main on NW 2nd Avenue between NW 135th Street and NW 131st Street in the City of North Miami. The project will include but not be limited to installation of the new utility, connection to the existing City Pump Station and existing force main system, utility testing, maintenance of traffic, roadway and site restoration, and all other appurtenances necessary for a complete utility installation. Construction of this project will require close coordination with the Owner and Engineer.

B. Omission of a specific item or component part of a system obviously necessary for the proper functioning of the system shall not relieve the Contractor of the responsibility of furnishing the item as part of the work at no additional cost to Owner.

C. The Specification Divisions and Drawings are an integrated part of the Contract Documents and as such will not stand alone if used independently as individual Sections, Divisions, or Drawing Sheets. The Drawings and Specifications establish minimum standards of quality for this Project. They do not purport to cover all details entering into the design and construction of materials or equipment.

D. All work associated with this project shall be subject to and in compliance with the City of North Miami, Miami-Dade County, and the Florida Department of Transportation.

E. Where portions of the work traverse or cross federal, state, county or local highways, roads, streets, or waterways, and the agency in control of such property has established standard specifications governing items of work that differ from these specifications, the most stringent requirements shall apply.

1.02 QUALITY ASSURANCE

A. Laws and Regulations: Contractor shall give all notices and comply with all laws, ordinances, rules, and regulations applicable to the work. If Contractor observes that the Specifications or Drawings are at variance therewith, Contractor shall give Engineer prompt written notice thereof, and any necessary changes shall be adjusted by an appropriate modification. If Contractor performs any work, knowing or having reason to know, that it is contrary to such laws, ordinances,

rules, and regulations, and without such notice to Engineer, Contractor shall bear all costs arising therefrom. However, it shall not be Contractor's primary responsibility to make certain that the Specifications and Drawings are in accordance with such laws, ordinances, rules, and regulations.

1.03 PROJECT SPECIFICATIONS

A. The Miami-Dade Standard Specifications and Details for Design and Construction of water and wastewater improvements, latest edition are hereby incorporated by reference and the Contractor shall comply with all requirements.

B. The applicable portions of the City of North Miami Codes and Florida Building Code shall apply to the project.

1.04 JOB CONDITIONS

A. Permits and Licenses: Contractor shall be responsible for verifying the existence of all necessary permits and licenses prior to start of work, obtaining copies, and for complying with provisions or requirements which relate to the performance of construction activities.

B. Any other permits which may be required shall be the Contractor's responsibility obtain. Contractor will be required to pay any fees associated with these permits, and any other building permit fees as required.

C. Contractor is required to provide a staging and MOT plans for review and approval by the City of North Miami and FDOT.

1.05 WORK SEQUENCE

A. The work shall proceed in a systematic manner so that public inconvenience during construction is minimized.

B. Contractor shall notify the City of North Miami Public Works Department 48 hours prior to beginning construction.

C. Continuous operation of the Owner's existing system is of critical importance. Work that requires the temporary shutdown of any existing operations or utilities shall be planned in detail with appropriate scheduling of the work and coordinated with the Owner or Engineer. The approved schedule for shutdown or restart shall be indicated on the Contractor's Progress Schedule, and advance notice shall be given 48 hours in advance so that the Owner or Engineer may witness the shutdown, tie-in, and start-up.

D. All materials and equipment (including emergency equipment) necessary to expedite tie-in of proposed utilities shall be on hand prior to the shutdown of existing services or utilities.

E. At no time shall the Contractor undertake to close off any lines or open valves or take any other action that would affect the operation of the existing system, except as specifically required by the Drawings and Specifications and after approval is granted by the Owner. Request approval five (5) working days in advance of the time that interruption of the existing system is required.

F. A detailed sequence of construction shall be submitted by the Contractor and approved by the Owner or Engineer before any work is started. The City of North Miami reserves the right to make changes to the sequence as necessary to facilitate the work or to minimize any conflict with operations.

1.06 USE OF PREMISES

A. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to areas permitted by law, ordinances, permits, or the requirements of the Contract documents and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. No storage of materials will be allowed on the site.

B. Contractor shall conduct his work in such a manner as to avoid damage to private or public property. Any damage to existing structures or work of any kind, or the interruption of utility service, shall be repaired or restored promptly at no additional expense to Owner.

C. Contractor shall not enter upon private property for any purpose without first securing the permission of the property owner in writing and furnishing Engineer with a copy of said permission. This requirement will be strictly enforced, particularly with regard to such vacant properties that may be used for material storage.

D. Contractor shall preserve and protect all existing vegetation such as trees, shrubs, and grass on or adjacent to the site that do not reasonably interfere with the construction, as determined by Engineer. Contractor shall 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. Contractor shall be liable for, or shall be required to replace or restore at no additional cost to Owner, all vegetation that is destroyed or damaged.

E. During the daily progress of the work, Contractor shall keep daily the premises free from accumulations of waste materials, rubbish, and other debris resulting from work. At the completion of the work, Contractor shall remove all waste materials, rubbish, and debris from and about the premises daily, as well as all tools, appliances, construction equipment and machinery, and surplus materials and shall leave the site clean and ready for occupancy by Owner. Contractor shall

restore to their original condition those portions of the site not designated for alteration by the Contract Documents.

F. Contractor shall not load or permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the work or adjacent property to stresses or pressures that will endanger it.

1.07 TEMPORARY CONSTRUCTION UTILITIES AND FACILITIES

A. The Contractor shall provide and maintain sanitary facilities for his employees and his subcontractors' employees that will comply with the regulations of the local and state Departments of Health and as directed by the Engineer. The Owner will provide a place of connection for temporary water, if required, for testing at the site, all fees for water service will be paid for by the Contractor. The Contractor shall provide all temporary piping required to bring the water to the point of use and shall remove the piping when no longer needed.

B. The Contractor shall be responsible for obtaining a source of electric power for construction. All temporary electric power installation shall meet the construction safety requirements of OSHA, state, and other governing agencies. Cost of electric power shall be borne by the Contractor.

1.08 SUBMITTALS DURING CONSTRUCTION

A. Engineer will review submittal data for compliance with specifications.

1.09 PROJECT RECORD DRAWINGS

A. Engineer will review submitted record documents for compliance with specifications.

1.10 PRE-CONSTRUCTION CONFERENCE

A. Within five (5) workings days following execution of the Contract but before work at the site starts, the Contractor shall meet with the City of North Miami and its Engineer for discussion of scheduling requirements, procedures for handling shop drawings and other submittals, for processing applications for payment, and to establish a working understanding among the parties as to the work.

PART 2 PRODUCTS

2.01 MATERIALS

A. Contractor shall at his own expense furnish all supplies, labor, and facilities necessary to install all materials in a manner satisfactory to Engineer.

PART 3 EXECUTION

A. Not Used.

END OF SECTION

SECTION 01010

SUMMARY OF WORK

PART 1 GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS

A. Furnish all labor, equipment and materials to install a new 10-inch force main on NW 2nd Avenue between NW 135th Street and NW 131st Street in the City of North Miami. The project will include but not be limited to installation of the new utility, connection to the existing City Pump Station and existing force main system, utility testing, maintenance of traffic, roadway and site restoration, and all other appurtenances necessary for a complete utility installation. Construction of this project will require close coordination with the Owner and Engineer.

B. Contractor's Duties:

1. Except as specifically noted, provide and pay for:
   a. Labor, materials, and equipment
   b. Tools, construction equipment, and fuel
   c. Water and utilities required for construction
   d. Freight, sales tax, and permit fees

1.02 CONTRACTS

A. Construct the work under a Lump Sum or Unit Price as indicated in the Contract Documents.

B. Subcontractors work directly for the Contractor.

1.03 WORK BY OTHERS AND FUTURE WORK

A. The Owner reserves the right to add or delete Work in accordance with the Contract.

1.04 CONTRACTORS USE OF THE PREMISES

A. Details of the construction sequence will be decided at the Pre-Work Conference.

PART 2 PRODUCTS

A. Not Used

PART 3 EXECUTION

A. Not Used

END OF SECTION

SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SCOPE OF THIS SECTION

A. The following explanation of the Measurement and Payment for the Bid Form items is provided; however, the omission of reference to any item shall not alter the intent of the Bid Form or relieve the Contractor of the necessity of constructing a complete project under this Contract.

B. The quantities set forth in the Bid Form are approximate and are given to establish a uniform basis for the comparison of bids. The Owner reserves the right to increase or decrease the quantity of any item or portion of the work during the progress of construction in accordance with the terms of the Contract.

C. Payment shall be made for the items listed on the Bid Form on the basis of the work actually performed and completed in accordance with the drawings and described in the specifications. If any item of work, process, equipment or material is not specifically listed in the unit price bid item schedule of values, the Contractor shall include and provide said work, process, equipment or material of the best quality workmanship appropriate for the intended use at no additional cost.

1.02 DESCRIPTION OF WORK

A. This section defines the method that will be used to determine the quantities of work performed or a material supplied, and establishes the basis upon which payment will be made.

1.03 METHOD OF MEASUREMENT

A. **Measurement of Length:** Unless otherwise specified for the particular items involved, all measurements of distance for items to be paid for on the basis of length shall be taken horizontally or vertically.

B. **Measurement of Area:** In the measurement of items paid for on the basis of area of finished work, the lengths and/or widths to be used in the calculations shall be the actual dimensions measured along the surface of the completed work within the neat lines shown or designated. At intersections, the measurement used for length of side area will be measured from the outside edge of the width allowed along the main trench.

1.04 PAYMENT

A. **Lump Sum Items:** Where payment is to be made on a lump sum basis, no separate payment will be made for any item of work required to complete the lump sum item.

B. **Unit Price Items:** Where payment is to be made on a unit price basis, separate payment will be made for the items of work described herein and listed on the Bid Form. Any related work not specifically listed, but required for satisfactory completion of the Work, shall be considered to be included in the scope of the appropriate listed work items.

1.07 COSTS INCLUDED IN PAYMENT ITEMS

A. No separate payment will be made for the following items and the cost of such work shall be included in the applicable pay items of work.

1. Cleanup.
2. Any material and equipment required to be installed and used for tests.
3. Maintaining the existing quality of service during construction.
4. Appurtenant work as required for a complete and operable system.
5. Products wasted or disposed of in a manner that is not acceptable.
6. Products determined as unacceptable before or after placement.
7. Products placed beyond the lines and levels of the required Work.
8. Products remaining on hand after completion of the Work.
9. Loading, hauling, and disposing of rejected Products.
10. Bypass pumping.
11. Testing.
12. Response to sewer backups (at any time).
13. Disposal of sewage from existing piping while installing the force main piping.
14. Replacement of any utilities or facilities damaged by the contractor within the project limits.

B. **Cleanup:** Contractor's attention is called to the fact that cleanup is considered a part of the work of construction. No payment will be made until cleanup is essentially complete.

C. **Work Outside Authorized Limits:** No payment will be made for work constructed outside the authorized limits of work.

1.08 APPLICATIONS FOR PAYMENT

A. Applications for Payment shall be prepared by the Contractor and submitted to the Engineer in accordance with the schedule established by the Conditions of the Contract and the Agreement.

B. Applications for Payment shall be submitted in the number and form approved by the Owner at the Preconstruction Conference. The form shall be completely filled out and executed by an authorized representative of the Contractor. Supporting data such as schedules and paid receipts of stored materials and release of liens shall be attached to each copy of the application.

1.09 CHANGE ORDER PROCEDURE

A. Requests for Change Orders shall be prepared by the Contractor and submitted to the Engineer in accordance with the schedule established by the Conditions of the Contract and the Agreement.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.01 BID ITEMS

A. BID ITEM NO. 1 – MOBILIZATION, MOT, BONDS & INSURANCE

Measurement: Work as specified in this section shall consist of work preparatory to actual construction at the site. It shall include, but not be limited to, movement of personnel, equipment, supplies, and incidentals to the project site, and for the establishment of temporary offices, buildings, safety equipment and first aid supplies, sanitary and other facilities as required by these Specifications, the Supplementary Conditions, and state and local laws and regulations. The costs of bonds and any required insurance, permits that are required to be obtained by the contractor, erosion control in accordance with permit conditions, adherence to the applicable NPDES permit and Stormwater Pollution Prevention Plan (SWPPP) regulations and requirements, proving video documentation of the existing site conditions before start of work, and any other preconstruction expense necessary for the start of the work, excluding the cost of construction materials, shall be included in this section.

Also included in this section will be all costs associated with Maintenance of Traffic (MOT), meetings and coordination with the Owner, FDOT, Miami-Dade County and Engineer for the purpose of discussing project progress. The costs shall include, but not be limited to, furnishing all materials, labor, and equipment required to install, maintain, and remove any and all required traffic control measures to control the flow of traffic through the work area within the public rights of way for all work. Preparation and submittal of any MOT plans to the Owner and any required agencies as well as coordination with these parties shall also be included in this item.

Payment: Price and payment shall be made as a lump sum quantity. The total of mobilization shall not exceed 10% of the contract price. Partial Payments for mobilization shall be as follows:

Construction Percent Complete	Allowable Percent of Lump Sum for Mobilization
5%	25%
10%	50%
25%	75%
100%	100%

The standard retainage will be applied to these allowances.

B. **BID ITEM NO. 2 – CLEARING AND GRUBBING**

Measurement: The cost shall include work associated with all clearing and grubbing required for the construction of the entire project, including all necessary hauling, furnishing equipment, equipment operation, furnishing any areas required for disposal of debris, leveling of terrain, trimming, etc., as specified herein, except for any areas designated to be paid for separately or to be specifically included in the costs of other work under the Contract.

Payment: Price and payment will be full compensation for performing and completing all the work of removal and satisfactory disposal of existing concrete sidewalk, rigid and flexible pavements, curb, curb and gutter, limerock, subgrade, fences, traffic separators, guardrails, signs, and other visible miscellaneous items within the right-of-way or where noted on the plans. Payment shall be made as a lump sum price.

C. **BID ITEM NO. 3 – TREE REMOVAL**

Measurement: The cost shall include all work and permitting associated with removing an existing tree located at the lift station site prior to installation of the proposed force main.

Payment: Price and payment will be full compensation for performing and completing all the work to remove and satisfactory disposal of the existing tree and root system. Price and payment shall include obtaining a tree removal permit from Miami Dade County and associated permitting fees. Costs associated with site restoration from the tree removal will be included in Bid Item No. 18. Payment shall be made as a lump sum price.

D. **BID ITEM NO. 4 AND 5 – FORCE MAIN, 8" DIP AND 10" DIP**

Measurement: The cost shall include material and work associated with installing 8" and 10" DIP force main as shown on the plans complete and accepted. Force main piping must be marked green for use with wastewater.

Payment: Price and payment shall be at the contract unit price for the length of pipe measured in place along the horizontal centerline of the pipe between the limits of the pipe as shown on the drawings and shall include, but not be limited to, location and coordination of all existing utilities prior to construction, furnishing and installing all materials, any additional piping required to account for the vertical change in elevation, linings, protective coatings, excavation of any type, trench safety, trench restoration and back fill, base restoration, first lift of asphaltic concrete (minimum thickness 1"), dewatering, new fill, compaction, disposal of undesirable material, flushing, pipeline testing, survey layout, record drawings, removal, repair or replacement of existing utilities impacted or damaged during construction, and appurtenances as called for on the plans for a complete and accepted piping system. The first lift of asphaltic concrete must be placed so that it is not impacted or removed as part of the proposed milling process. Costs associated with asphaltic concrete surface course overlay will be included in Bid Item No. 13.

E. **BID ITEM NO. 6 AND 7 – TAPPING SLEEVE AND VALVE, 18" X 10" AND 8" X 8"**

Measurement: The cost shall include material and work associated with installing tapping sleeves and valves for buried service as shown on the plans complete and accepted. The cost shall include all materials, labor, and equipment associated with connecting the new force main to the existing wastewater system and includes all investigation of the existing pipe material and connection points.

Payment: Price and payment shall be at the contract unit price and shall include furnishing and installing tapping sleeves and valves, valve boxes, concrete pads, extension nuts, restraining devices on the new and existing piping, excavation, and backfill and compaction at locations shown on the drawings and as specified for complete and accepted system connections. All testing, flushing, survey layout, and record drawing requirements shall be included in Bid Item No. 4 and 5.

F. **BID ITEM NO. 8 AND 9 – FORCE MAIN FITINGS, DUCTILE IRON**

Measurement: The cost shall include material and work associated with installing ductile iron force main fittings complete and accepted.

Payment: Price and payment shall be at the contract unit price for each fitting and shall include location and coordination of all fittings, furnishing and installing all fittings, restraining devices, glands, gaskets, bolts and nuts, linings, and protective coatings for a complete and accepted piping system. All testing, flushing, survey layout, and record drawing requirements shall be included in Bid Item No. 4 and 5.

G. **BID ITEM NO. 10 – PLUG VALVE, 10"**

Measurement: The cost shall include material and work associated with installing plug valves for buried service as shown on the plans complete and accepted. The cost shall include all materials, labor, and equipment associated with plug valve installation.

Payment: Price and payment shall be at the contract unit price and shall include furnishing and installing plug valves, valve boxes, concrete pads, extension nuts, restraining devices, excavation, and backfill and compaction at locations shown on the drawings and as specified for a complete and accepted valve installation. All testing, flushing, survey layout, and record drawing requirements shall be included in Bid Item No. 4 and 5.

H. **BID ITEM NO. 11 – AUTOMATIC AIR RELEASE VALVE ASSEMBLY, WASTEWATER SERVICE**

Measurement: The cost shall include material and work associated with installing force main air release valve assemblies as shown on the plans complete and accepted. Force main air release valves shall be automatic operation type and installed in a concrete vault with vented manhole cover.

Payment: Price and payment shall be at the contract unit price for the number of force main air release valve assemblies installed and shall include, but not be limited to, location and coordination of air release valve prior to installation, furnishing and installing all materials, corporation stops, pipe, fittings, couplings, taps, valve vault/box, connection to force main, excavation, backfill and compaction as specified for a complete and accepted air release valve assembly. All testing, flushing, survey layout, and record drawing requirements shall be included in Bid Item No. 4 and 5.

I. **BID ITEM NO. 12 – MILLING EXISTING ASPHALT PAVEMENT (MINIMUM DEPTH 1")**

Measurement: The cost shall include labor and equipment associated with milling the existing asphalt throughout the project area as shown on the plans.

Payment: Price and payment shall be made at the contract unit price per square yard of existing asphalt milled (minimum depth 1") prior to placing the asphalt concrete surface overlay, Bid Item No. 13, hauling and removal of debris, and surface preparation. The first lift of asphaltic concrete referenced in Bid item No. 4 and 5 must be placed so that it is not impacted or removed as part of this proposed milling process.

J. BID ITEM NO. 13 – ASPHALTIC CONCRETE SURFACE OVERLAY TYPE SP-9.5 (FINE MIX)

Measurement: The cost shall include materials, labor and equipment associated with installing the asphalt concrete surface overlay throughout the project area as shown on the plans complete and accepted.

Payment: Price and payment shall be made at the contract unit price per square yard and include all costs associated with installing the asphalt concrete surface overlaying (minimum thickness 1") upon completion of the entire trench restoration and back fill, base restoration, first lift of asphaltic concrete, and milling processes. This asphalt concrete surface overlay bid item includes costs to provide a smooth and continuous grade throughout the entire asphalt overlay process to avoid areas of standing water. All asphalt costs associated with the first lift of pavement during the trench restoration and base restoration process shall be included in Bid Item No. 4 and 5.

K. BID ITEM NO. 14 – ADJUST UTILITY COVERS

Measurement: The cost shall include materials, labor and equipment necessary to adjust existing manhole rims, valve, junction, utility covers, electric pull boxes, and any incidentals as may be required throughout the project area and the course of construction to maintain a true and level driving and walking surface.

Payment: Price and payment will be full compensation for performing and completing all existing utility cover adjustments. The cost to adjust any new utility covers shall be included in the associated bid item. Payment shall be made as a lump sum price.

L. BID ITEM NO. 15 – PAVEMENT MARKINGS

Measurement: The cost shall include all materials, labor and equipment necessary to install all pavement markings after completion of the overlay process as shown on the plans complete and accepted.

Payment: Price and payment will be full compensation for installing all Thermoplastic pavement markings including temporary pavement markings prior to thermoplastic. Costs associated with replacing existing signs damaged as a result of construction will be the responsibility of the contractor. Payment shall be made as a lump sum price.

M. **BID ITEM NO. 16 – GROUT/ABANDON EXISTING FORCE MAIN**

Measurement: The cost shall include all materials, labor and equipment necessary for grouting the existing force main once it is placed out of service.

Payment: Price and payment shall be at the contract unit price and shall include furnishing and installing grout material, pipe cutting and removal as required for grout ports, grout filling of existing utilities, cutting and capping existing force main, excavation, backfill, compaction at locations shown on the drawings, and hauling and legal off-site disposal of debris. All survey layout and record drawing requirements shall be included in Bid Item No. 4 and 5.

N. **BID ITEM NO. 17 – SITE RESTORATION/SIGNAL LOOP REPLACEMENT**

Measurement: The cost shall include all materials, labor and equipment associated with restoration of parking lots, driveways, sidewalks, curbing, fencing, swale areas, trees, plants, and any other existing areas affected by installing the proposed or abandoning the existing force main piping.

Payment: Price and payment will be full compensation to restore all areas disturbed or damaged during construction to conditions existing prior to the work and in compliance with the project specifications, City of North Miami, Miami Dade County, and FDOT requirements. This bid item includes all costs and coordination associated with the Miami-Dade County Public Works Department for permitting and replacement of all traffic signal loops impacted by construction. This bid item shall also include all general clean up required for a complete and accepted project. Payment shall be made as a lump sum price.

END OF SECTION

SECTION 01040

PROJECT COORDINATION

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

A. Engineer will coordinate the work between Prime Contractors as required.

B. The Contractor shall:

1. Coordinate work of his employees and subcontractors.
2. Expedite his work to assure compliance with schedules.
3. Comply with orders and instructions of Engineer.

1.02 RELATED REQUIREMENTS

A. Section 01200 – Project Meetings.

B. Section 01300 – Submittals

C. Section 01700 – Contract Closeout.

1.03 CONSTRUCTION ORGANIZATION AND START-UP

A. Engineer shall establish on-site lines of authority and communications:

1. Schedule and conduct pre-construction meeting and progress meetings as specified in Section 01200.
2. Establish procedures for:
   a. Submittals
   b. Reports and records
   c. Recommendations
   d. Coordination of drawings
   e. Schedules
   f. Resolution of conflicts
3. Interpret Contract Documents:
   a. Transmit written interpretations to Contractors, and to other concerned parties.
4. Assist in obtaining permits and approvals:
   a. Verify that contractor[s] and subcontractors have obtained inspections for Work and for temporary facilities.
5. Control the use of Site:

a. Allocate space for Contractor's use for field offices, sheds, and work and storage areas.

6. Inspection and Testing:
   a. Inspect work to assure performance in accord with requirements of Contract Documents.
   b. Administer special testing and inspections of suspect Work.
   c. Reject Work which does not comply with requirements of Contract Documents.

1.04 CONTRACTOR'S DUTIES

A. Construction Schedules:

1. Prepare a detailed schedule of basic operations.
2. Monitor schedules as work progresses:
   a. Identify potential variances between scheduled and probable completion dates of each phase.
   b. Recommend to Owner adjustments in schedule to meet required completion dates.
   c. Document changes in schedule; submit to Owner, Engineer and to involved subcontractors.
3. Observe work of each subcontractor to monitor compliance with schedule.
   a. Verify that labor and equipment are adequate for the work and the schedule.
   b. Verify that product procurement schedules are adequate.
   c. Verify that product deliveries are adequate to maintain schedule.
   d. Report noncompliance to Engineer, with recommendation for changes.
4. Provide a monthly updated schedule.

B. Process Shop Drawings, Product Data and Samples:

1. Prior to submittal to Engineer, review for compliance with Contract Documents:
   a. Field dimensions and clearance dimensions.
   b. Relation to available space.
   c. Effect of any changes on the work of any subcontractor.

C. Prepare Coordination Drawings as required to resolve conflicts and to assure coordination of the work of, or affected by, mechanical and electrical trades, or by special equipment requirements.

1. Submit to Engineer.
2. Reproduce and distribute copies to concerned parties after Engineer review.

D. Maintain Reports and Records at Job Site, available to Engineer and Owner.

1. Daily log of progress of work.
2. Records
   a. Contracts
   b. Purchase orders
   c. Materials and equipment records
   d. Applicable handbooks, codes and standards
3. Maintain file of record documents

1.05 CONTRACTOR'S CLOSE-OUT DUTIES

A. At completion of Work, conduct an inspection to assure that:

1. Specified cleaning has been accomplished.
2. Temporary facilities have been removed from site.

B. Substantial Completion:

1. Conduct an inspection to develop a list of Work to be completed or corrected.
2. Assist Engineer in inspection.
3. Supervise correction and completion of work of subcontractors.

1.06 ENGINEER'S CLOSE-OUT DUTIES

A. Final Completion:

1. When Contractor determines that Work is finally complete, conduct an inspection to verify completion of Work.

B. Administration of Contract closeout:

1. Receive and review contractor's final submittals.
2. Transmit to Owner with recommendations for action.

PART 2 PRODUCTS

A. Not Used

PART 3 EXECUTION

A. Not Used

END OF SECTION

SECTION 01090

REFERENCE STANDARDS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

Abbreviations and acronyms used in Contract Documents to identify reference standards.

1.02 QUALITY ASSURANCE

A. Application: When a standard is specified by reference, comply with requirements and recommendations stated in that standard, except when requirements are modified by the Contract Documents or applicable codes establish stricter standards.

B. Publication Date: The publication in effect on the date of issue of Contract Documents, except when a specific publication date is specified.

C. For Products or workmanship specified by association, trade, or other consensus standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.

D. Conform to reference standard by date of issue current on bid date.

E. Obtain copies of standards when required by the Contract Documents.

F. Maintain copy at project site during submittals, planning, and progress of the specific work, until Substantial Completion.

G. Should specified reference standards conflict with Contract Documents, request clarification from the Engineer before proceeding.

H. Neither the contractual relationship, duties, nor responsibilities of the parties in Contract nor those of the Engineer shall be altered by the Contract Documents by mention or inference otherwise in any reference document.

1.03 ABBREVIATIONS, NAMES, AND ADDRESSES OR ORGANIZATIONS

A. Obtain copies of reference standards direct from publication source, when needed for proper performance of work, or when required for submittal by Contract Documents.

B. The following, as appropriate to project, is a list of referenced standards and their mailing addresses for requesting copies of standards:

AA	Aluminum Association 818 Connecticut Avenue, NW Washington, D.C. 20006
AASHTO	American Association of State Highway and Transportation Officials 444 North Capitol Street, NW Washington, D.C. 20001
ACI	American Concrete Institute Box 19150 Redford Station Detroit, MI 48219
AI	Asphalt Institute Asphalt Institute Building College Park, MD 20740
AISC	American Institute of Steel Construction 1221 Avenue of the Americas New York, NY 10020
AISI	American Iron and Steel Institute 1000 16th Street, NW Washington, D.C., 20036
ANSI	American National Standards Institute 1430 Broadway New York, NY 10018
ASME	American Society of Mechanical Engineers 345 East 47th Street New York, NY 10017
ASPA	American Sod Producers' Association Association Building Ninth and Minnesota Hastings, NE 68901
ASSE	American Society of Sanitary Engineers 960 Illuminating Building Cleveland, OH 44113

ASTM	American Society for Testing and Materials 1916 Race Street Philadelphia, PA 19103
AWPA	American Wood-Preservers Association 7735 Old Georgetown Road Bethesda, MD 20014
AWS	American Welding Society 2501 NW 7th Street Miami, FL 33125
AWWA	American Water Works Association 6666 W. Quincy Avenue Denver, CO 80235
CDA	Copper Development Association 57th Floor, Chrysler Building 405 Lexington Avenue New York, NY 10017
City	City of North Miami 1815 NE 150 ST North Miami, FL 33181 305-895-9838 Ext. 15005
CLFMI	Chain Link Fence Manufacturers Institute 1101 Connecticut Avenue Washington, D.C. 20036
CRSI	Concrete Reinforcing Steel Institute 180 North LaSalle Street, Suite 2110 Chicago, IL 60601
DRER	Miami-Dade Department of Regulatory and Economic Resources 701 NW 1st Court, Ste 400 Miami, Florida 33136
FDOT	Florida Department of Transportation Haydon Burns Building 605 Suwannee Street Tallahassee, FL 32301

FM	Factory Mutual System 1151 Boston-Providence Turnpike Norwood, MA 02062
WASD	Miami-Dade County Water and Sewer Department 3071 SW 38th Avenue Miami, FL 33146
NEMA	National Electrical Manufacturers Association 2101 L Street, NW Washington, D.C. 20037
NFPA	National Fire Protection Association 470 Atlantic Avenue Boston, MA 02210
NFPA	National Forest Products Association 1619 Massachusetts Avenue, NW Washington, D.C. 20036
NSF	National Sanitation Foundation NSF Building 3475 Plymouth Road Ann Arbor, MI 48106
NSWMA	National Solid Waste Management Association 1120 Connecticut Avenue, NW Washington, D.C. 20036
PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 20076
PCI	Prestressed Concrete Institute 20 North Wacker Drive Chicago, IL 60606
PS	Product Standard U.S. Department of Commerce Washington, D.C. 20203
TCA	Technical Aid Series Construction Specifications Institute 1150 Seventeenth Street, NW Washington, D.C. 20036

UL	Underwriters Laboratories, Inc. 333 Pfingston Road Northbrook, IL 60062

PART 2 PRODUCTS

B. Not Used

PART 3 EXECUTION

B. Not Used

END OF SECTION

SECTION 01200

PROJECT MEETINGS

PART 1 GENERAL

1.01 DESCRIPTION

A. Owner shall schedule and administer a general preconstruction meeting, periodic progress meetings, public involvement meetings/communications, and specially called meetings throughout the progress of the work. Owner/Engineer shall:

1. Distribute written notice of each meeting.
2. Make physical arrangements for meetings.
3. Preside at meetings.
4. Record the minutes, include all significant proceedings and decisions.
5. Reproduce and distribute copies of minutes:
   a. To all participants in the meeting.
   b. To all parties affected by decisions made at the meeting.

B. Representatives of contractors, subcontractors and suppliers attending the meetings shall be qualified and authorized to act on behalf of the entity each represents.

1.02 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

A. Drawings and general provisions of the Contract, including the General Conditions and Terms and Division 1 Specification sections, apply to this section.

B. Section 01010 - Summary of Work

1.03 PRE-CONSTRUCTION MEETING

A. To be held prior to the Notice to Proceed.

B. Location: The project site, or as designated by the Owner/Engineer.

C. Attendance:

1. Owner's Representative
2. Engineer’s Representative
3. Contractor
4. Contractor's Superintendent
5. Major Subcontractors
6. Others as appropriate

D. Agenda:

1. Record of Attendance.
2. Project Summary Description.
3. Local Utilities to be affected.

    a. Water lines
    b. Sewer lines
    c. Storm lines
    d. Gas lines
    e. Telephone lines
    f. Cable TV lines
    g. Electric lines
    h. Roadways
    i. Waterways

4. Contractor Responsibilities:

    a. Start date
    b. Completion date
    c. Work schedule
    d. Notification Requirements
    e. Regulatory Permit Requirements
    f. Testing
    g. Space utilization
    h. Rights-of-Way occupancy
    i. Progress Meetings
    j. Progress Payment Application
    k. As-builts (Records/Drawings)
    l. Photographs
    m. Shop drawings
    n. Subcontractors
    o. Project coordination

5. Owner Responsibilities:

    a. Monthly meetings
    b. Special meetings
    c. Partial and final payment
    d. Change Orders
    e. Public announcements and public relations
    f. Project acceptance

6. Engineer Responsibilities:

   a. Technical representative of Owner
   b. Interpreter of contract documents
   c. Periodic inspections of job progress
   d. Reviews partial and final payment applications
   e. Change Order review
   f. Checks and approves shop drawings
   g. Record drawing review
   h. Prepares FDEP Clearance Package
   i. Performs final inspection and issues certificate of completion

7. Resident Inspector Responsibilities:

   a. Owner's representative on site
   b. Review materials and work and reports any deficiencies to Owner/Engineer
   c. Reviews applications for payment
   d. Works with Contractor on public notification of work items
   e. Attends progress meetings
   f. Observes testing work
   g. Maintains daily diary of work tasks
   h. Furnishes reports to Owner/Engineer as deemed advisable

1.04 PROGRESS MEETINGS

A. Hold periodic meetings as required by progress of the work.

B. Location of the meetings: Project site, or as designated by the Owner or Engineer.

C. Attendance:

   1. Owner's Representative
   2. Engineer's Representative
   3. Subcontractors as appropriate
   4. Suppliers as appropriate

1.05 EMERGENCY MEETINGS

A. May be called by Owner, Engineer or Contractor with a minimum of three hours notice to resolve conditions of an emergency nature.

PART 2 PRODUCTS

A. Not Used

PART 3 EXECUTION

A. Not Used

END OF SECTION

SECTION 01300

SUBMITTALS

PART 1 GENERAL

1.01 WORK INCLUDED

A. This section covers the requirements for submittal procedures as they pertain to:

1. Construction progress schedules
2. Proposed Products list
3. Shop drawings
4. Product data
5. Samples
6. Manufacturers' instructions
7. Manufacturers' certificates

1.02 SUBMITTAL PROCEDURES

A. Submittals shall be addressed to:

Wisler Pierre-Louis, P.E.
City Engineer
Public Works Department
1815 NE 150 ST
North Miami, FL 33181
305-895-9838 Ext. 15005

B. Sequentially number the transmittal forms. Resubmittals to have original number with an alphabetic suffix.

C. Identify Project, Contractor, Subcontractor or supplier, pertinent Drawing sheet and detail number(s), and specification Section number, as appropriate.

D. Drawings and schedules shall be checked and coordinated with the work of all trades involved, before they are submitted for review by the Engineer and shall bear the Contractor's stamp of approval as evidence of such checking and coordination.

Drawings or schedules submitted without this stamp of approval shall be returned to the Contractor for resubmission.

E. If drawings show variations from Contract requirements because of standard shop practice or for other reasons, describe such variations in the letter of transmittal. If acceptable, proper adjustment in the Contract shall be implemented where appropriate. Failure to describe such variations does not relieve the Contractor of the responsibility for executing the work in accordance with the Contract, even though such drawings have been reviewed.

F. Each Shop Drawing shall have a blank area 3-1/2 inches by 3-1/2 inches, located adjacent to the title block. The title block shall display the following:

1. Number and title of the drawing.

2. Date of drawing or revision.

3. Name of project building or facility.

4. Name of contractor and subcontractor submitting drawing.

5. Clear identification of contents and location of the work.

6. Specification title and number.

7. Specification Section.

8. Applicable Drawing Number.

G. Revise and resubmit submittals as required; identify all changes made since previous submittal.

H. Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions.

I. Requirements in this Section are in addition to any specific requirements for submittals specified in other Divisions and Sections of these Contract Documents.

1.03 CONSTRUCTION PROGRESS SCHEDULES

A. Submit initial progress schedule in triplicate within 15 days after date established in the Notice to Proceed for Engineer review.

B. Revise and resubmit as project conditions require. Revised schedules shall be submitted a minimum of two (2) weeks prior to commencement of Work covered by schedule.

C. Submit revised schedules with each Application for Payment, identifying changes since previous version.

D. Show complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Indicate the early and late start, early and late finish, float dates, and duration.

E. Indicate estimated percentage of completion for each item of Work at each submission.

F. Indicate submittal dates required for shop drawings, product data, samples, and product delivery dates, including those furnished by Owner and under Allowances.

1.04 PROPOSED PRODUCTS LIST

A. Within 30 days after date established in the Notice to Proceed, submit a complete list of major products proposed for use, with name of manufacturer, trade name, and model number of each product.

B. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.

1.05 SHOP DRAWINGS

A. Submit the number of opaque reproductions which Contractor requires, plus four copies, which will be retained by Engineer (maximum of eight).

B. When used in the Contract Documents, the term "Shop Drawings" shall be considered to mean, Contractor's drawings plans for material and equipment which become an integral part of the Project. These drawings shall be complete and detailed. Shop Drawings shall consist of fabrication, erection and setting drawings and schedule drawings, manufacturer's scale drawings, and wiring and control diagrams. Cuts, catalogs, pamphlets, descriptive literature, and performance and test data, shall be considered only as supportive to required Shop Drawings as defined above.

C. Data on materials and equipment include, without limitation, materials and equipment lists, catalog data sheets, cuts, performance curves, diagrams, materials of construction and similar descriptive material. Materials and equipment lists shall give, for each item thereon, the name and location of the supplier or manufacturer, trade name, catalog reference, size, finish and all other pertinent data.

D. For all mechanical and electrical equipment furnished, provide a list including the equipment name, address, telephone number of the manufacturer's representative and service company so that service and/or spare parts can be readily obtained.

E. All manufacturers or equipment suppliers who proposed to furnish equipment or products shall submit an installation list to the Engineer along with the required shop drawings. The installation list shall include at least five installations where identical equipment has been installed and has been in operation for a period of at least one (1) year.

F. Only the Engineer will utilize the color "red" in marking Shop Drawing submittals.

1.06 PRODUCT DATA

A. Submit the number of copies which the Contractor requires, plus four copies which will be retained by the Engineer (with a maximum of eight).

B. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information unique to this Project.

1.07 SAMPLES

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

B. Submit samples of finishes in custom colors selected, textures, and patterns for Engineer’s selection.

C. Include identification on each sample, with full Project information.

D. Submit the number or samples specified in individual specification Sections; one of which will be retained by Engineer.

E. Samples not destroyed in testing shall be sent to the Engineer or stored at the site of the work. Accepted samples of the hardware in good condition will be marked for identification and may be used in the work. Materials and equipment incorporated in the work shall match the accepted samples. Samples which failed testing or are not accepted will be returned to the Contractor at his expense, if so requested at time of submission.

1.08 MANUFACTURER'S INSTRUCTIONS

A. When specified in individual specification Sections, submit manufacturers' printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, in quantities specified for Product Data.

B. Identify conflicts between manufacturers' instructions and Contract Documents.

1.09 MANUFACTURER'S CERTIFICATES

B. When specified in individual specification Sections, submit manufacturers' certificate to Engineer for review, in quantities specified for Product Data.

C. Indicate material or Product conforms to or exceeds specified requirements. Submit supporting reference date, affidavits, and certifications as appropriate.

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

1.10 RECORD DOCUMENTS

A. Engineer will review submitted record documents for compliance with specifications.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01400

QUALITY CONTROL

PART 1 GENERAL

1.01 WORK INCLUDED

A. This section covers the work as required to provide and/or coordinate:

1. Quality assurance and control of installation
2. References
3. Inspection
4. Manufacturers' field services and reports

1.02 REFERENCES

A. Conform to reference standard by date of current issue on date for receiving bids.

B. Should specified reference standards conflict with Contract Documents, request clarification from Owner or Engineer before proceeding.

C. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.03 QUALITY ASSURANCE/CONTROL OF INSTALLATION

A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.

B. Comply fully with manufacturers' instructions, including each step in sequence.

C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Owner or Engineer before proceeding.

D. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.

E. Perform work by persons qualified to produce workmanship of specified quality.

F. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01500

CONSTRUCTION FACILITIES

PART 1 GENERAL

1.01 WORK INCLUDED

A. Temporary Utilities: Electricity, lighting, heat, ventilation, telephone service, water, and sanitary facilities.

B. Temporary Controls: Enclosures and fencing, protection of the Work, traffic control, and water control.

C. Construction Facilities: Access roads, parking, progress cleaning, and temporary buildings.

D. Some of the items specified herein are not specifically required for the project. However, these items shall be provided as required for the convenience of the Contractor or as required for proper completion of the Work.

E. Barricades, lights and other items that may be required to conform to existing safety and traffic regulations.

1.02 WASTEWATER REMOVAL/DISPOSAL

A. The Contractor shall be prepared to remove and dispose of wastewater from the existing force main system as a part of the new force main installation process. He shall submit a plan for this aspect of the work to the Engineer for approval prior starting work. The Contractor shall provide all vacuum truck, pumps, piping, and other equipment to accomplish this task; perform all construction; obtain all permits; pay all costs; and perform complete restoration of all existing facilities to equal or better condition and to the satisfaction of the Engineer. At no time will sewage be allowed to spill onto any surface. Any leaks in temporary piping, hoses, connectors or equipment shall be sealed immediately, the spill thoroughly cleaned and the area disinfected.

B. A noise barrier shall be provided for the equipment if required by the Engineer. Vacuum truck and or pumping operations shall be manned at all times.

C. Under no circumstance shall the dumping of raw sewage be allowed. Such spills caused by the Contractor's operations shall be volumetrically measured, cleaned, and disinfected immediately by the Contractor using methods and disinfectants required by applicable law. Spills and other unpermitted

discharges shall be immediately reported to the appropriate agency as required by applicable law. The Owner shall be so notified within the same time frame.

1.03` TEMPORARY ELECTRICITY (AS APPLICABLE)

A. Provide and pay for power service, as required, from Florida Power and Light source.

B. Provide temporary electric feeder from electrical service. Power consumption shall not disrupt Owner's need for continuous service.

C. Provide separate metering and pay Florida Power and Light for cost of energy used.

D. Provide power outlets for construction operations, with branch wiring and distribution boxes located as required. Provide flexible power cords as required.

E. Provide main service disconnect and overcurrent protection at a convenient location.

F. Permanent convenience receptacles may not be utilized during construction.

1.04 TEMPORARY WATER SERVICE (AS APPLICABLE)

A. Provide and maintain suitable quality water service, as required, for construction operations.

B. Extend branch piping with outlets located so water is available by hoses with threaded connections.

C. Make arrangements with Owner for obtaining meter. Owner will also direct contractor as to where water may be obtained.

1.05 TEMPORARY SANITARY FACILITIES

A. Provide and maintain required facilities and enclosures. Existing private facilities shall not be used.

1.06 FENCING

A. Construction: Commercial grade chain link fence.

B. Provide 6-foot high fence to secure material storage areas. Security fence shall be equipped with gates and locks.

1.07 PROTECTION OF INSTALLED WORK

A. Protect installed Work and provide special protection where specified in individual specification Sections.

B. Provide temporary and removable protection for installed Products. Control activity in immediate work area to minimize damage.

C. Prohibit traffic from landscaped areas.

1.08 SECURITY

A. Provide security and facilities to protect Work, and existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft.

1.09 PROGRESS CLEANING

A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.

B. Broom and vacuum clean interior areas prior to start of surface finishing and continue cleaning to eliminate dust.

C. Remove waste materials, debris, and rubbish from sites weekly and dispose of at an approved site.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01530

PROTECTION OF EXISTING FACILITIES

PART 1 GENERAL

1.01 GENERAL

A. The Contactor shall protect all existing utilities and improvements not designated for removal and shall restore damaged or temporarily relocated utilities and improvements to a condition equal to or better than they were prior to such damage or temporary relocation, all in accordance with requirements of the Contract Documents.

B. The Contactor shall verify the exact locations and depths of all utilities shown and the Contactor shall make exploratory excavations of all utilities that may interfere with the WORK. All such exploratory excavations shall be performed as soon as practicable after award of the contract and, in any event, a sufficient time in advance of construction to avoid possible delays to the Contactor's work. When such exploratory excavations show the utility location as shown to be in error, the Contactor shall so notify the Engineer.

C. The number of exploratory excavations required shall be that number which is sufficient to determine the alignment and grade of the utility.

1.02 RIGHTS-OF-WAY

A. The Contactor shall not do any work that would affect any oil, gas, sewer, or water pipeline; any telephone, telegraph, or electric transmission line; any fence; or any other structure, nor shall the Contactor enter upon the rights-of-way involved until notified by the Engineer that the Owner has secured authority therefor from the proper party. After authority has been obtained, the Contactor shall give said party due notice of its intention to begin work, if required by said party, and shall remove, shore, support or otherwise protect such pipeline, transmission line, ditch, fence, or structure or replace the same. When two or more contracts are being executed at one time on the same or adjacent land in such manner that work on one contract may interfere with that on another, the Owner shall determine the sequence and order of the WORK. When the territory of one contract is the necessary or convenient means of access for the execution of another contract, such privilege of access or any other reasonable privilege may be granted by the Owner to the Contactor so desiring, to the extent, amount, in the manner, and at the times permitted. No such decision as to the method or time of conducting the WORK or the use of territory shall be made the basis of any claim for delay or damage, except as provided for temporary suspension of the WORK in the General Conditions of the Contract.

1.03 PROTECTION OF STREET OR ROADWAY MARKERS

A. The Contactor shall not destroy, remove, or otherwise disturb any existing survey markers or other existing street or roadway markers without proper authorization. No pavement breaking or excavation shall be started until all survey or other permanent marker points that will be disturbed by the construction operations have been properly referenced. All survey markers or points disturbed by the Contactor shall be accurately restored after all street or roadway resurfacing has been completed.

1.04 RESTORATION OF PAVEMENT

A. **General:** All paved areas including asphaltic concrete berms cut or damaged during construction shall be replaced with similar materials and of equal thickness to match the existing adjacent undisturbed areas, except where specific resurfacing requirements have been called for in the Contract Documents or in the requirements of the agency issuing the permit. All temporary and permanent pavement shall conform to the requirements of the affected pavement owner. All pavements which are subject to partial removal shall be neatly saw cut in straight lines.

B. **Temporary Resurfacing:** Wherever required by the public authorities having jurisdiction, the Contactor shall place temporary surfacing promptly after backfilling and shall maintain such surfacing for the period of time fixed by said authorities before proceeding with the final restoration of improvements.

C. **Permanent Resurfacing:** In order to obtain a satisfactory junction with adjacent surfaces, the Contactor shall saw cut back and trim the edge so as to provide a clean, sound, vertical joint before permanent replacement of an excavated or damaged portion of pavement. Damaged edges of pavement along excavations and elsewhere shall be trimmed back by saw cutting in straight lines. All pavement restoration and other facilities restoration shall be constructed to finish grades compatible with adjacent undisturbed pavement.

D. **Restoration of Sidewalks or Private Driveways:** Wherever sidewalks or private roads have been removed for purposes of construction, the Contactor shall place suitable temporary sidewalks or roadways promptly after backfilling and shall maintain them in satisfactory condition for the period of time fixed by the authorities having jurisdiction over the affected portions before proceeding with the final restoration or, if no such period of times is so fixed, the Contactor shall maintain said temporary sidewalks or roadways until the final restoration thereof has been made.

1.05 EXISTING UTILITIES AND IMPROVEMENTS

A. **General:** The Contactor shall protect all Underground Utilities and other improvements which may be impaired during construction operations. It shall be the Contactor's responsibility to ascertain the actual location of all existing utilities and other improvements that will be encountered in its construction operations, and to see that such utilities or other improvements are adequately protected from damage due to such operations. The Contactor shall take all possible precautions for the protection of unforeseen utility lines to provide for uninterrupted service and to provide such special protection as may be necessary.

B. **Utilities to be Moved:** In case it shall be necessary to move the property of any public utility or franchise holder, such utility company or franchise holder will, upon request of the Contactor, be notified by the Owner to move such property within a specified reasonable time. When utility lines that are to be removed are encountered within the area of operations, the Contactor shall notify the Engineer a sufficient time in advance for the necessary measures to be taken to prevent interruption of service.

C. Where the proper completion of the WORK requires the temporary or permanent removal and/or relocation of an existing utility or other improvement which is indicated, the Contactor shall remove and, without unnecessary delay, temporarily replace or relocate such utility or improvement in a manner satisfactory to the Engineer and the Owner of the facility. In all cases of such temporary removal or relocation, restoration to former location shall be accomplished by the Contactor in a manner that will restore or replace the utility or improvement as nearly as possible to its former locations and to as good or better condition than found prior to removal.

D. **Owner's Right of Access:** The right is reserved to the Owner and to the Owners of public utilities and franchises to enter at any time upon any public street, alley, right-of-way, or easement for the purpose of making changes in their property made necessary by the WORK of this Contract.

E. **Underground Utilities Indicated:** Existing utility lines that are indicated or the locations of which are made known to the Contactor prior to excavation and that are to be retained, and all utility lines that are constructed during excavation operations shall be protected from damage during excavation and backfilling and, if damaged, shall be immediately repaired or replaced by the Contactor.

F. **Underground Utilities Not Indicated:** In the event that the Contactor damages any existing utility lines that are not indicated or the locations of which are not made known to the Contactor prior to excavation, a written report thereof shall be made immediately to the Engineer.

G. All costs of locating, repairing damage not due to failure of the Contactor to exercise reasonable care, and removing or relocating such utility facilities not shown in the Contract Documents with reasonable accuracy, and for equipment on the project which was actually working on that portion of the work which was interrupted or idled by removal or relocation of such utility facilities, and which was necessarily idled during such work will be paid for as extra work in accordance with the provisions of the General Conditions.

H. **Approval of Repairs:** All repairs to a damaged utility or improvement are subject to inspection and approval by an authorized representative of the utility or improvement owner and the Engineer before being concealed by backfill or other work.

I. **Maintaining in Service:** All oil and gasoline pipelines, power, and telephone or the communication cable ducts, gas and water mains, irrigation lines, sewer lines, storm drain lines, poles, and overhead power and communication wires and cables encountered along the line of the WORK shall remain continuously in service during all the operations under the Contract, unless other arrangements satisfactory to the Engineer are made with the owner of said pipelines, duct, main, irrigation line, sewer, storm drain, pole, or wire or cable. The Contactor shall be responsible for and shall repair all damage due to its operations, and the provisions of this Section shall not be abated even in the event such damage occurs after backfilling or is not discovered until after completion of the backfilling.

J. **Existing Water Services:** Contactor shall protect and provide temporary support for existing water services. Any water service damaged by the Contactor shall be replaced, at the Contactor's expense, with a new water service, complete with new water main tap.

1.06 TREES WITHIN STREET RIGHTS-OF-WAY AND PROJECT LIMITS

A. **General:** The Contactor shall exercise all necessary precautions so as not to damage or destroy any trees or shrubs, including those lying within street rights-of-way and project limits, and shall not trim or remove any trees unless such trees have been approved for trimming or removal by the jurisdictional agency or Owner. All existing trees and shrubs which are damaged during construction shall be trimmed or replaced by the Contactor or a certified tree company under permit from the jurisdictional agency and/or the Owner. Tree trimming and replacement shall be accomplished in accordance with the following paragraphs.

B. **Trimming:** Symmetry of the tree shall be preserved; no stubs or splits or torn branches left; clean cuts shall be made close to the trunk or large branch. Spikes shall not be used for climbing live trees. All cuts over 1-1/2 inches in diameter shall be coated with an asphaltic emulsion material.

C. **Replacement:** The Contactor shall immediately notify the jurisdictional agency and/or the Owner if any tree is damaged by the Contactor's operations. If, in the opinion of said agency or the Owner, the damage is such that replacement is necessary, the Contactor shall replace the tree at its own expense. The tree shall be of a like size and variety as the tree damaged, or, if of a smaller size, the Contactor shall pay to the owner of said tree a compensatory payment acceptable to the tree owner, subject to the approval of the jurisdictional agency or Owner. The size of the replacement trees shall be not less than 1-inch diameter nor less than 6 feet in height.

1.07 STRUCTURES AND IMPROVEMENTS ON PRIVATE PROPERTY

A. If, at any time, the Owner believes the operations of the Contactor during construction operations may risk damage to structures and/or improvements located on private property, the Contactor shall cease and desist such operations and shall propose a modification to such operations so as to reduce or eliminate the risk of damage to said structures and/or improvements. The operations which may require modification shall include, but shall not be limited to, the method of vibratory compaction.

1.08 NOTIFICATION BY THE CONTRACTOR

A. Prior to any excavation in the vicinity of any existing underground facilities, including all water, sewer, storm drain, gas, petroleum products, or other pipelines; all buried electric power, communications, or television cables; all traffic signal and street lighting facilities; and all roadway and state highway rights-of-way the Contactor shall notify the respective authorities representing the owners or agencies responsible for such facilities not less than three (3) days nor more than seven (7) days prior to excavation so that a representative of said owners or agencies can be present during such work if they so desire. The Contactor shall also notify the Sunshine State One Call Center 1-800-432-4770 at least two (2) days, but no more than fourteen (14) days, prior to such excavation.

PART 2 PRODUCTS

2.01 MATERIALS, GENERAL

A. Materials may be new or used, suitable for the intended purpose, but must not violate requirements of applicable codes and standards.

2.02 FENCING

A. Materials to Contactor's option, minimum fence height = 6 feet.

2.03 BARRIERS

A. Materials to Contactor's option, as appropriate to serve required purpose.

PART 3 EXECUTION

3.01 GENERAL

A. Install facilities of a neat and reasonable uniform appearance, structurally adequate for required purposes.

B. Maintain barriers during entire construction period.

C. Relocate barriers as required by progress of construction.

3.02 TREE AND PLANT PROTECTION

A. Preserve and protect existing trees and plants adjacent to work areas.

B. Consult with Owner's Representative and remove agreed-on roots and branches which interfere with work.

1. Employ qualified tree surgeon to remove branches, and to treat cuts.

C. Protect root zones of trees and plants.

1. Do not allow vehicular traffic and parking.
2. Do not store materials or products.
3. Prevent dumping of refuse or chemically injurious materials or liquids.
4. Prevent puddling or continuous running water.

D. Carefully supervise all work to prevent damage.

E. Replace trees and plants which are damaged or destroyed due to work operations under this contract.

3.03 REMOVAL

A. Completely remove barricades, including foundations, when construction has progressed to the point that they are no longer needed, and when approved by Owner's Representative.

B. Clean and repair damage caused by installation, fill and grade areas of the site to required elevations and slopes, and clean the area.

END OF SECTION

SECTION 01700

CONTRACT CLOSEOUT

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

A. Drawings and general provisions of the Contract, including the General Conditions and Terms and Division 1 Specification sections, apply to this section.

1.02 SUBSTANTIAL COMPLETION

A. When Contractor considers his work is substantially complete, he shall submit to Engineer:

1. A written notice that the work, or designated portion thereof, is substantially complete.
2. A list of items to be completed or corrected.

B. Within a reasonable time after receipt of such notice, Engineer will review the work to determine the status of completion.

C. Should Engineer determine that the work is not substantially complete:

1. Engineer will promptly notify the Contractor, in writing, giving the reasons.
2. Contractor shall remedy the deficiencies in the work, and shall send a second written notice of substantial completion to Engineer
3. Engineer will re-review the work

D. When Engineer concurs that the work is substantially complete, he will:

1. Prepare a Certificate of Substantial Completion, accompanied by a list of items to be completed or corrected
2. Submit the Certificate to Owner and Contractor for their written acceptance of the responsibilities assigned to them in the certificate.

1.03 FINAL INSPECTION

A. When Contractor considers the work is complete, he shall submit written certification that:

1. Contract Documents have been reviewed
2. Work has been inspected for compliance with Contract Documents

3. Work has been completed in accordance with Contract Documents
4. Equipment and systems have been tested in the presence of the Owner's representative and are operational
5. Work is completed and ready for final inspection

B. Engineer will review the work to verify the status of completion with reasonable promptness after receipt of such certification.

C. Should Engineer consider that the work is incomplete or defective:

1. Engineer will promptly notify the Contractor, in writing, listing the incomplete or defective work.
2. Contractor shall take immediate steps to remedy the stated deficiencies, and send a second written certification to Engineer that the work is complete.
3. Engineer will re-review the work

D. When Engineer finds that the work is acceptable under the Contract Documents, he shall request the Contractor to make closeout submittals.

1.04 RE-INSPECTION FEES

Should the Engineer perform re-inspection due to failure of the work to comply with the claims of status of completion made by the Contractor, Contractor will compensate Engineer/Owner for such additional services.

1.05 ADDITIONAL SERVICES

Should Engineer be required to provide representation at the site for the administration of the Contract for Construction, more than thirty days after the specified Date of Substantial Completion of the work, Contractor will compensate Engineer for such additional services.

1.06 CONTRACTOR'S CLOSEOUT SUBMITTALS TO ENGINEER

A. Evidence of compliance with requirements of governing authorities.

B. Project Record Documents

C. Warranties and Bonds

D. Evidence of Payment and Release of Liens: To requirements of the General Conditions and Terms of the Contract.

E. Certificate of Insurance for Products and Completed Operations.

1.07 FINAL ADJUSTMENT OF ACCOUNTS

A. Submit a final statement of accounting to Engineer.

B. Statement shall reflect all adjustments to the Contract Sum:

1. The original Contract Sum
2. Additions and deductions resulting from:

    a. Previous change orders
    b. Allowances
    c. Unit prices
    d. Deductions for uncorrected work
    e. Deductions for liquidated damages
    f. Deductions for re-inspection payments
    g. Other adjustments

3. Total Contract sum, as adjusted
4. Previous payments
5. Sum remaining due

C. Prepare a final change order, reflecting approved adjustments to the Contract sum which were not previously made by change order.

1.08 FINAL APPLICATION FOR PAYMENT

A. Contractor shall submit the final Application for Payment in accordance with procedures and requirements stated in the Conditions of the Contract.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 02800

ROADWAY AND SITE RESTORATION

PART 1 GENERAL

1.01 DESCRIPTION OF WORK

A. The work includes restoration of roadways, parking lots, driveways, sidewalks, curbing, fencing, lawn areas, trees and plants, traffic signal loops, signalization, and any other existing areas affected by the force main project. This section includes furnishing equipment, labor and materials, and performing all necessary and incidental operations to perform the required work.

B. All areas disturbed or damaged during construction shall be restored to conditions existing prior to the work and in compliance with the Contract Documents, Miami-Dade County Standards, City of North Miami, and FDOT requirements.

1.02 RELATED SECTIONS

A. Section 01000 – General Requirements

1.03 MEASUREMENT AND PAYMENT

A. Measurement and Payment for items covered by this section will be as detailed in Section 01025.

PART 2 PRODUCTS

2.01 Comply with Contract Documents, Miami-Dade County Standards, City of North Miami, and FDOT requirements.

PART 3 EXECUTION

3.01 Comply with Contract Documents, Miami-Dade County Standards, City of North Miami, and FDOT requirements.

END OF SECTION

SECTION 15050

PIPE AND FITTINGS

PART 1 GENERAL

1.01 WORK INCLUDED

A. The work covered by this section and the related sections following consists of providing all labor, material, equipment and performing all construction required to install the new force main as specified and shown on the drawings.

B. Like items provided hereunder shall be the end products of one manufacturer in order to achieve standardization for appearance, operation and maintenance.

1.02 SUBMITTALS

A. Submit shop drawings of pipe and fittings in accordance with the requirements in Section 01300 – Submittals and the requirements of the referenced standards.

1.03 CONNECTION TO EXISTING WORK BY OTHERS OR EXISTING LINES

A. Connection to existing lines, to which piping of this Contract must connect, the following work shall be performed:

1. Confirm or determine end connection, pipe material dimensions and diameter.

2. Furnish and install appropriate piping, couplings and make proper connections.

3. The Contractor shall verify exact location, material, alignment, joint, etc., of existing piping and equipment prior to making the connections called out in the Drawings. The verifications shall be performed with adequate time to correct any potential alignment or other problems prior to the actual time of connection.

PART 2 PRODUCTS

2.01 Comply with Contract Documents, Miami-Dade County Standards, and City of North Miami requirements.

PART 3 EXECUTION

3.01 Comply with Contract Documents, Miami-Dade County Standards, and City of North Miami requirements.

END OF SECTION