



City of Cambridge

Purchasing Department

Cynthia H. Griffin
Purchasing Agent

TO: ALL BIDDERS

FROM: CITY OF CAMBRIDGE

DATE: JUNE 8, 2011

RE: MYRTLE/MAGNOLIA DRAINAGE IMPROVEMENT PROJECT
FILE NO. 5479

Please note the attached Addendum No. 1.

All other particulars remain unchanged.

CYNTHIA H. GRIFFIN
PURCHASING AGENT

ADDENDUM NO. 1



Addendum No. 1

MYRTLE/MAGNOLIA AVENUE DRAINAGE IMPROVEMENTS CONTRACTS NO. VI-3C

**CITY OF CAMBRIDGE, MASSACHUSETTS
SPECIFICATIONS
FOR MYRTLE/MAGNOLIA AVENUE DRAINAGE IMPROVEMENTS CONTRACTS NO. VI-3C**

ADDENDUM NO. 1

JUNE 8, 2011

I. GENERAL

The attention of bidders submitting proposals for the above referenced project is called to the following Addendum to the contract plans and specifications. The items set forth herein, whether of omission, addition, substitution, or clarification are all included in the proposed work. This addendum consists of 1 page.

This addendum is comprised of the following:
Modifications to Specifications

Inclusion of this Addendum must be acknowledged by inserting its number on page 00300-1 of the Bid Proposal. Failure to acknowledge any or all addenda in the above-specified bid may be cause for rejection of the bid by the Owner on the grounds that it is not responsive.

II. SUMMARY OF PRE-BID MEETING

The Pre-Bid meeting was held on Tuesday, May 31, 2011 at 2:00 at the City of Cambridge Department of Public Works (CDPW) located at 147 Hampshire Street, Cambridge, Massachusetts 02139. The Owner and the Engineer were in attendance. There were no other attendees at the Pre-Bid meeting.

III. ANSWER TO BIDDERS QUESTIONS

From: P. Caliacco Corp., Marc Ciampa
Date: May 25, 2011

Question: Is the City of Cambridge planning to add bid items 2095.1 through 2095.11, Transportation and Disposal of Soils, by addendum? It appears that they have been inadvertently left off of the Form for General Bids.

Answer: This is an oversight on the Form for General Bids and bid forms. The bid items 2095.1 through 2095.11 have been added to the revised Form for General Bids and are attached within this addendum. The entire Bid Package for the Myrtle/Magnolia Avenue Drainage Improvements Contracts No. VI-3C has been revised and is attached, and will be reissued with this addendum.

Addendum No. 1

MYRTLE/MAGNOLIA AVENUE DRAINAGE IMPROVEMENTS CONTRACTS NO. VI-3C

From: P. Gioioso & Sons, Inc., Joseph Bettencourt

Date: May 27, 2011

Question: The contract bid forms do not include any payment items for contaminated soil disposal, Items No. 2080.2 through 2095.11.

Answer: This is an oversight on the Form for General Bids and bid forms. The bid items 2080.2 through 2095.11 have been added to the revised Form for General Bids and are attached within this addendum. The entire Bid Package for the Myrtle/Magnolia Avenue Drainage Improvements Contracts No. VI-3C has been revised and is attached, and will be reissued with this addendum.

From: Baltazar Contractors, Inc., Dinis Baltazar

Date: June 7, 2011

Question: Sheet CS-1 shows the installation of a new sewer manhole #7 along with replacing the existing 10" VC sewer with new 10" PVC sewer from SMH #7 to STA 41+22. It also states to "Connect the Proposed 10" PVC sewer with the existing 10" VC sewer with Pipe Field Enclosure at STA 42+52. The issue is that since all of the existing VC will be replaced with PVC there will be no 10" VC to connect to. It will be all 10" PVC out of SMH #7. Was the enclosure written in error or do you still want there to be an enclosure on the new 10" PVC sewer at that station?

Answer: We are proposing that the two (2) 10" PVC sewer pipes be joined by a Pipe Field Enclosure.

IV. MODIFICATIONS TO SPECIFICATIONS

A. SECTION 00220 – AMERICANS WITH DISABILITIES ACT

DELETE section in its entirety and **REPLACE** it with the attached section **00220ADD1 – AMERICANS WITH DISABILITIES ACT.**

B. SECTION 00300 – FORM FOR GENERAL BID

DELETE section in its entirety and **REPLACE** it with the attached section **00300ADD1 – FORM FOR GENERAL BID.** Specifically, the following changes have been made:

1. **ADD ITEM 2080.2 – OHM - Handling Chlorinated Solvent Contaminated Soil/Fill** estimated quantity 1070 cubic yards
2. **ADD ITEM 2080.3 – OHM - Handle and Characterize Unknown Material** estimated quantity 10 cubic yards
3. **ADD ITEM 2095.1 – OHM - Disposal of Soil – Impacted<RCS-1 (Class A-2)** estimated quantity 650 tons

Addendum No. 1

MYRTLE/MAGNOLIA AVENUE DRAINAGE IMPROVEMENTS CONTRACTS NO. VI-3C

4. **ADD ITEM 2095.3 – OHM - Disposal of Soil – Daily Cover Unlined Landfill (Class B-1)** estimated quantity 3900 tons
 5. **ADD ITEM 2095.4 – OHM - Disposal of Soil – Non-Hazardous Solid Waste Asphalt Batching In-State (Class B-3)** estimated quantity 340 tons
 6. **ADD ITEM 2095.5 – OHM - Disposal of Soil – Non-Hazardous Solid Waste Thermal Treatment (Class B-4)** estimated quantity 40 tons
 7. **ADD ITEM 2095.6 – OHM - Disposal of Soil – Non-Hazardous Solid Waste Recycling (Class B-5)** estimated quantity 40 tons
 8. **ADD ITEM 2095.7 – OHM - Disposal of Soil – Non-Hazardous Solid Waste (Class B-6)** estimated quantity 30 tons
 9. **ADD ITEM 2095.8 – OHM - Disposal of Soil – Treat and Dispose of Toxic Lead Soil RCRA Hazardous Waste (Class C-1)** estimated quantity 10 tons
 10. **ADD ITEM 2095.9 – OHM - Disposal of Soil – RCRA Hazardous Waste (Class C-2)** estimated quantity 10 tons
 11. **ADD ITEM 2095.10 – OHM - Disposal of Asbestos Waste** estimated quantity 10 tons
 12. **ADD ITEM 2095.11 – OHM - Disposal of PCB/TSCA Contaminated Soils** estimated quantity 10 tons
 13. **DELETE ITEM 2615.9 – FKM (VITON) Gaskets for DI (GRAVITY)** estimated quantity 40 each
 14. **ADD ITEM 2615.9.1 – FKM (VITON) Gaskets for DI<36” (GRAVITY)** estimated quantity 10 each
 15. **ADD ITEM 2615.9.2 – NBR (NITRILE) Gaskets for DI≥36” (GRAVITY)** estimated quantity 95 each
- C. SECTION 00310 – BID BOND**
DELETE section in its entirety and **REPLACE** with the attached section **00310ADD1**.
- D. SECTION 00311 – MBE FORMS (CITY OF CAMBRIDGE)**
DELETE section in its entirety and **REPLACE** with the attached section **00311ADD1 – MBE FORMS (CITY OF CAMBRIDGE)**.

Addendum No. 1

MYRTLE/MAGNOLIA AVENUE DRAINAGE IMPROVEMENTS CONTRACTS NO. VI-3C

- E. SECTION 00312 – STATEMENT OF BIDDER’S QUALIFICATIONS**
DELETE section in its entirety and **REPLACE** with the attached section **00312ADD1 – STATEMENT OF BIDDER’S QUALIFICATIONS.**
- F. SECTION 00313 – GENERAL CONTRACTOR’S CERTIFICATION**
DELETE section in its entirety and **REPLACE** with the attached section **00313ADD1 – GENERAL CONTRACTOR’S CERTIFICATION.**
- G. SECTION 00315 – PROJECTED WORKFORCE CERTIFICATION**
DELETE section in its entirety and **REPLACE** with the attached section **00315ADD1 – PROJECTED WORKFORCE CERTIFICATION.**
- H. SECTION 00316 – CREP GENERAL CONTRACTOR’S CERTIFICATION FORM**
DELETE section in its entirety and **REPLACE** with the attached section **00316ADD1 - CREP GENERAL CONTRACTOR’S CERTIFICATION FORM.**
- I. SECTION 00317 – CREP GENERAL CONTRACTOR’S CERTIFICATION – WEEKLY FORM**
DELETE section in its entirety and **REPLACE** with the attached section **00317ADD1 - CREP GENERAL CONTRACTOR’S CERTIFICATION - WEEKLY FORM.**
- J. SECTION 00322 – CORI COMPLIANCE FORM**
DELETE section in its entirety and **REPLACE** with the attached section **00322ADD1 – CORI COMPLIANCE FORM.**
- K. SECTION 00323 – OSHA GENERAL CONTRACTOR CERTIFICATION FORM**
DELETE section in its entirety and **REPLACE** with the attached section **00323ADDA – OSHA GENERAL CONTRACTOR CERTIFICATION FORM.**
- L. SECTION 02615 – DUCTILE IRON PIPE FOR SANITARY AND STORM DRAIN GRAVITY AND FORCEMNAINS**
DELETE section in its entirety and **REPLACE** it with the attached section **02615ADD1 - DUCTILE IRON PIPE FOR SANITARY AND STORM DRAIN GRAVITY AND FORCEMNAINS.** Specifically, the following changes have been made:

1. **DELETE** the following item 2615.9 on page 02615-1:

“2615.9	FKM (VITON) GASKETS FOR DI (GRAVITY)	EACH
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2. **ADD** the following items 2615.9.1 and 2615.9.2 on page 02615-1:

“2615.9.1	FKM (VITON) GASKETS FOR DI < 36” (GRAVITY)	EACH
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“2615.9.2	NBR (NITRILE) GASKETS FOR DI ≥ 36” (GRAVITY)	EACH
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3. **DELETE** paragraph 2.3 A on page 02615-4 and **REPLACE** with the following:

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MYRTLE/MAGNOLIA AVENUE DRAINAGE IMPROVEMENTS CONTRACTS NO. VI-3C

- “A. Push-on and mechanical joint gaskets for the full length of Myrtle Avenue (station 30+00 to 36+00) **for DI < 36” (GRAVITY)** shall be FKM (Viton) Gaskets or equal gasket acceptable for use in an environment with perchloroethylene and tetrachloroethene and their subsequent derivatives.”
4. **ADD** the following section 2.3 C. after section 2.3 B. on page 02615-4:
- “C. Push-on and mechanical joint gaskets for the full length of Myrtle Avenue (station 30+00 to 36+00) **for DI ≥ 36” (GRAVITY)** shall be Nitrile (NBR) (Acrylonitrile Butadiene) Gaskets or equal gasket acceptable for use in an environment with perchloroethylene and tetrachloroethene and their subsequent derivatives.”
5. **DELETE** the following measurement and payment item **2615.9 FKM (VITON) Gaskets for DI (GRAVITY)** on page 02615-12:
- “Item 2615.9 – FKM (Viton) Gaskets for DI (Gravity)**
- METHOD OF MEASUREMENT:
FKM (Viton) Gasket for DI (Gravity) shall be paid per FKM (Viton) Gasket for DI (Gravity) installed complete regardless of pipe size.
- BASIS OF PAYMENT / INCLUSIONS:
FKM (Viton) Gasket for DI (Gravity) shall be based on the unit price bid for this item in the proposal. Under the Unit Price for this item, the Contractor shall furnish all labor, materials, tools, equipment, and incidentals required for the complete installation of FKM (Viton) Gasket for DI (Gravity) regardless of pipe size, as shown and indicated in the Contract Documents, at the requirements of the Engineer and as specified.”
6. **ADD** the following measurement and payment items **2615.9.1 FKM (VITON) Gaskets for DI < 36” (GRAVITY)** and **2615.9.2 NBR (NITRILE) for DI > 36” (GRAVITY)** on page 02615-12 and 02615-13:
- “Item 2615.9.1 – FKM (Viton) Gaskets for DI < 36” (Gravity)**
- METHOD OF MEASUREMENT:
FKM (Viton) Gasket for DI < 36” (Gravity) shall be paid per FKM (Viton) Gasket for DI (Gravity) installed complete regardless of pipe

size greater than 36-in diameter.

BASIS OF PAYMENT / INCLUSIONS:

FKM (Viton) Gasket for DI < 36" (Gravity) shall be based on the unit price bid for this item in the proposal. Under the Unit Price for this item, the Contractor shall furnish all labor, materials, tools, equipment, and incidentals required for the complete installation of FKM (Viton) Gasket for DI < 36" (Gravity) regardless of pipe size greater than 36-in diameter, as shown and indicated in the Contract Documents, at the requirements of the Engineer and as specified.

Item 2615.9.2 – NBR (Nitrile) Gaskets for DI ≥ 36" (Gravity)

METHOD OF MEASUREMENT:

NBR (Nitrile) Gasket for DI ≥ 36" (Gravity) shall be paid per NBR (Nitrile) Gasket for DI (Gravity) installed complete regardless of pipe size up to and including 36-in diameter.

BASIS OF PAYMENT / INCLUSIONS:

NBR (Nitrile) Gasket for DI ≥ 36" (Gravity) shall be based on the unit price bid for this item in the proposal. Under the Unit Price for this item, the Contractor shall furnish all labor, materials, tools, equipment, and incidentals required for the complete installation of NBR (Nitrile) Gasket for DI ≥ 36" (Gravity) regardless of pipe size up to and including 36-in diameter, as shown and indicated in the Contract Documents, at the requirements of the Engineer and as specified.

M. SECTION 02699 – PRIVATE INFLOW REMOVAL

ADD the following items 2699.1.1, 2699.1.2, and 2699.1.3 on page 02699-1

"2699.1.1	SEPARATE ROOF DRAIN AT BASEMENT CEILING	LUMP SUM
"2699.1.2	SEPARATE ROOF DRAIN AT BASEMENT FLOOR SLAB	LUMP SUM
"2699.1.3	SEPARATE SUMP PUMP DISCHARGE	LUMP SUM

SECTION 00220ADD1

AMERICANS WITH DISABILITIES ACT (42 U.S.C. 12131)
Section 504 of the Rehabilitation Act of 1973

The Americans with Disabilities Act (the "Act") applies to all employers of fifteen or more employees. All vendors that are subject to the Act must comply with its provisions. In further compliance with the Act, all Contractors who enter into contracts with the City are prohibited from discrimination against the City's employees, regardless of the size of the Contractor.

The Act protects against discrimination on the basis of "disability", which is defined as a physical or mental impairment that substantially limits at least one "major life activity"; discrimination against a person having a history or record of such impairment; and discrimination against an individual regarded - even if inaccurately - as having such an impairment. The Act also expressly prohibits discrimination that is based on an individual's relationship or association with a disabled person.

The bidder shall not discriminate against any qualified employee or job applicant with a disability and will make the activities, programs and services covered by any contract awarded through this procurement readily accessible to and usable by individuals with disabilities. To be qualified for a job, or to avail oneself of the bidder's services, the individual with the disability must meet the essential eligibility requirements for receipt of the bidder's services or participation in the bidder's programs or activities with or without: 1) reasonable modifications to the bidder's rules, policies and practices; 2) removal of architectural, communication, or transportation barriers; or, 3) provisions of auxiliary aids and services.

By submitting its bid, the bidder certifies to the City of Cambridge that it understands and will comply with all applicable provisions of the Act, including compliance with applicable provisions of Section 504 of the Rehabilitation Act of 1973, if the bidder is receiving federal funds.

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals

As required by M.G.L. c. 62C, §49A, the undersigned certifies under the penalties of perjury that the bidder has complied with all laws of the commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support.

Date: _____

(Print Name of person signing bid)

(Signature & Title)

- END OF SECTION 00220ADD1 -

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SECTION 00300ADD1
FORM FOR GENERAL BID

To the Awarding Authority: CITY OF CAMBRIDGE, MASSACHUSETTS

A. The undersigned proposes to furnish all labor and materials required for

Myrtle/Magnolia Drainage Improvement Project

CAMBRIDGE, MA

in accordance with the accompanying plans and specifications including all Labor and Materials, for the contract price specified below, subject to additions and deductions according to the terms of the specifications.

The bidder may utilize subcontractors' qualifications for responding to the quality requirements. However, the bidder is specifically advised that any person, firm or other party to whom it proposes to award a subcontract under the terms of this contract must be acceptable to the owner and to the Commonwealth of Massachusetts.

The bidder must provide references including telephone number and contact names from at least three locations where they are currently providing the same services. References will be used in determining the responsibility of the bidder. The city reserves the right to use itself as a reference.

B. QUALITY REQUIREMENTS

The City of Cambridge will reject any bid that does not meet the quality requirements. A "no" response or a failure to respond to any of the following quality requirements will result in a rejection of your bid.

- | | | |
|--|-----|----|
| 1. Bidder has been in the business of performing reconstruction of sewers, drains, water mains, sidewalks, and roadways for municipalities or public utilities for at least ten (10) years. | YES | NO |
| 2. Bidder has equipment and personnel available to respond within four (4) hours to emergency calls relating to work of this contract 24 hours a day, 7 days a week, throughout the contract period. | YES | NO |

C. This bid includes addenda numbered _____

Bidder's Name _____

D. The Proposed Contract Price for the **Base Bid** is

DOLLARS

(\$ _____)

E. The subdivision of the Proposed Contract Price is as follows: **(All quantities are approximate)**

F. **Items 2080.1 through 2095.10 and 2890.1 contain the minimum unit prices. The Contractor shall add to this value an adjustment to provide the final unit price bid for the respective item. The final unit price bid shall be the sum of the minimum unit price and the Bidders additional price. Insertion of 0 is allowable. In that case, the final unit cost will be the minimum unit cost.**

(SEE FOLLOWING PAGES)

Bidder's Name _____

BASE BID ITEMS

Item #	Estimated Quantity	Units	ITEM DESCRIPTION Description of the Work and Unit Price Bid Written in Words and Numbers	Amount
920.101	1	Lump Sum	Hovey Storage Tank Installation ____ Dollars (\$ _____) Per Lump Sum	\$ _____
920.102	1	Lump Sum	Hovey Pump Station Installation ____ Dollars (\$ _____) Per Lump Sum	\$ _____
920.103	1	Lump Sum	Kirkland Junction Structure Installation ____ Dollars (\$ _____) Per Lump Sum	\$ _____
920.104	1	Lump Sum	Myrtle Junction Structure Installation ____ Dollars (\$ _____) Per Lump Sum	\$ _____
920.105	1	Lump Sum	Magnolia Diversion Structure Installation ____ Dollars (\$ _____) Per Lump Sum	\$ _____

Bidder's Name _____

Item #	Estimated Quantity	Units	ITEM DESCRIPTION Description of the Work and Unit Price Bid Written in Words and Numbers	Amount
920.106	1	Lump Sum	Magnolia Overflow Structure Installation _____ Dollars (\$ _____) Per Lump Sum	\$ _____
1200.1	1	Lump Sum	Temporary Utility Support and Coordination _____ Dollars (\$ _____) Per Lump Sum	\$ _____
1505.1	1	Lump Sum	Mobilization (Maximum 5% Base Bid) _____ Dollars (\$ _____) Per Lump Sum	\$ _____
1570.1	1	Lump Sum	Traffic and Pedestrian Management _____ Dollars (\$ _____) Per Lump Sum	\$ _____
1570.2	310	Square Foot	Safety Signing for Construction Operations _____ Dollars (\$ _____) Per Square Foot	\$ _____
1570.3	72	Unit Week	Variable Message Boards _____ Dollars (\$ _____) Per Unit Week	\$ _____

Bidder's Name _____

Item #	Estimated Quantity	Units	ITEM DESCRIPTION Description of the Work and Unit Price Bid Written in Words and Numbers	Amount
2051.1	100	Ton	Disposal of Construction Debris as Solid Waste (\$ _____) Per Ton _____ Dollars	\$ _____
2051.2	1,280	Ton	Disposal of Bituminous Concrete (\$ _____) Per Ton _____ Dollars	\$ _____
2051.3	7	Each	Demolition or Removal of Lamp Hole, Manhole, Catch Basin or Other Structure (\$ _____) Each _____ Dollars	\$ _____
2080.1	1	Lump Sum	OHM – Soil and Waste Management Thirty Seven Thousand and 00/100 + _____ = _____ Dollars (\$37,000.00 + _____) Per Lump Sum	\$ _____
2080.2	1070	CY	OHM – Handling Chlorinated Solvent Contaminated Soil/Fill (\$ _____) Each _____ Dollars	\$ _____
2080.3	10	CY	OHM – Handle and Characterize Unknown Material (\$ _____) Each _____ Dollars	\$ _____

Bidder's Name _____

Item #	Estimated Quantity	Units	ITEM DESCRIPTION Description of the Work and Unit Price Bid Written in Words and Numbers	Amount
2095.1	650	Ton	OHM – Disposal of Soil – Impacted <RCS-1 (Class A-2) _____ (\$ _____) Each _____ Dollars	\$ _____
2095.2	3900	Ton	OHM – Disposal of Soil – Daily Cover Unlined Landfill (Class B-1) _____ (\$ _____) Each _____ Dollars	\$ _____
2095.3	1430	Ton	OHM – Disposal of Soil – Daily Cover Lined Landfill (Class B-2) _____ (\$ _____) Each _____ Dollars	\$ _____
2095.4	340	Ton	OHM – Disposal of Soil – Non-Hazardous Solid Waste Asphalt Batching In-State (Class B-3) _____ (\$ _____) Each _____ Dollars	\$ _____
2095.5	40	Ton	OHM – Disposal of Soil – Non-Hazardous Solid Waste Thermal Treatment (Class B-4) _____ (\$ _____) Each _____ Dollars	\$ _____
2095.6	40	Ton	OHM – Disposal of Soil – Non-Hazardous Solid Waste Recycling (Class B-5) _____ (\$ _____) Each _____ Dollars	\$ _____

Bidder's Name _____

Myrtle/Magnolia
Addendum No. 1

FORM FOR GENERAL BID
00300ADD1-6

Item #	Estimated Quantity	Units	ITEM DESCRIPTION Description of the Work and Unit Price Bid Written in Words and Numbers	Amount
2095.7	30	Ton	OHM – Disposal of Soil – Non-Hazardous Solid Waste (Class B-6) _____ Dollars (\$ _____) Each	\$ _____
2095.8	10	Ton	OHM – Disposal of Soil – Treat and Dispose of Toxic Lead Soil RCRA Hazardous (Class C-1) _____ Dollars (\$ _____) Each	\$ _____
2095.9	10	Ton	OHM – Disposal of Soil – RCRA Hazardous Waste (Class C-2) _____ Dollars (\$ _____) Each	\$ _____
2095.10	10	Ton	OHM – Disposal of Asbestos Waste _____ Dollars (\$ _____) Each	\$ _____
2095.11	10	Ton	OHM – Disposal of PCB/TSCA Contaminated Soils _____ Dollars (\$ _____) Each	\$ _____
2100.1	1	Lump Sum	Tree Protection and Maintenance _____ Dollars (\$ _____) Per Lump Sum	\$ _____

Bidder's Name _____

Myrtle/Magnolia
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FORM FOR GENERAL BID
00300ADD1-7

Item #	Estimated Quantity	Units	ITEM DESCRIPTION Description of the Work and Unit Price Bid Written in Words and Numbers	Amount
2140.1	20	Day	Treatment of Construction Dewatering (\$ _____) Per Day _____ Dollars	\$ _____
2210.1	150	Cubic Yard	Test Pits (\$ _____) Per Cubic Yard _____ Dollars	\$ _____
2210.2	921	Cubic Yard	Control Density Fill for Backfill (\$ _____) Per Cubic Yard _____ Dollars	\$ _____
2252.1.1	250	Vertical Foot	Manhole – Pre-cast 4-Foot Diameter (\$ _____) Per Vertical Foot _____ Dollars	\$ _____
2252.1.3	90	Vertical Foot	Manhole – Pre-cast 6-Foot Diameter (\$ _____) Per Vertical Foot _____ Dollars	\$ _____
2252.1.4	20	Vertical Foot	Manhole – Pre-cast 8-Foot Diameter (\$ _____) Per Vertical Foot _____ Dollars	\$ _____

Bidder's Name _____

Myrtle/Magnolia
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FORM FOR GENERAL BID
00300ADD1-8

Item #	Estimated Quantity	Units	ITEM DESCRIPTION Description of the Work and Unit Price Bid Written in Words and Numbers	Amount
2500.1.1	830	Ton	Bituminous Concrete Base Course – Trench Width (\$ _____) Per Ton _____ Dollars	\$ _____
2500.1.2	1480	Ton	Bituminous Concrete Base Course – Full Width (\$ _____) Per Ton _____ Dollars	\$ _____
2500.1.3	740	Ton	Bituminous Concrete Top Course – Full Width (\$ _____) Per Ton _____ Dollars	\$ _____
2500.1.4	30	Ton	Bituminous Concrete – Hand Placed (\$ _____) Per Ton _____ Dollars	\$ _____
2500.2.1	1,330	Square Yard	Cold Plane 2-in, Full Width (\$ _____) Per Square Yard _____ Dollars	\$ _____
2500.2.2	6,600	Square Yard	Pavement Reclamation/Pulverizing, Full Width, 8-In Depth (\$ _____) Per Square Yard _____ Dollars	\$ _____

Bidder's Name _____

Myrtle/Magnolia
Addendum No. 1

FORM FOR GENERAL BID
00300ADD1-9

Item #	Estimated Quantity	Units	ITEM DESCRIPTION Description of the Work and Unit Price Bid Written in Words and Numbers	Amount
2500.3	6,600	Square Yard	Final Grading Sub-Base Under Roadways (\$ _____) Per Square Yard Dollars	\$ _____
2500.4	500	Linear Foot	Hot Poured Rubberized Asphalt Sealer (\$ _____) Per Linear Foot Dollars	\$ _____
2500.5	500	Linear Foot	Bituminous Concrete Infrared Pavement Sealing (\$ _____) Per Linear Foot Dollars	\$ _____
2524.1.1	510	Square Yard	4" Cement Concrete Sidewalks (\$ _____) Per Square Yard Dollars	\$ _____
2524.1.2	330	Square Yard	6" Cement Concrete Sidewalks at Driveways (\$ _____) Per Square Yard Dollars	\$ _____
2524.1.3	300	Square Yard	6" Cement Concrete Pedestrian Ramps (\$ _____) Per Square Yard Dollars	\$ _____

Bidder's Name _____

Item #	Estimated Quantity	Units	ITEM DESCRIPTION Description of the Work and Unit Price Bid Written in Words and Numbers	Amount
2524.2.1	1240	Square Yard	Wire Cut Bricks on 4-in Bituminous Concrete Base (Sidewalks and Driveways) (\$ _____) Per Square Yard Dollars	\$ _____
2524.3.1.1	910	Linear Foot	Remove and Reset Granite Curb (Straight and Curved) (\$ _____) Per Linear Foot Dollars	\$ _____
2524.3.1.2	440	Linear Foot	Remove and Reset Granite Transition Curb for Pedestrian Ramps (Straight and Curved) (\$ _____) Per Linear Foot Dollars	\$ _____
2524.3.2.1	910	Linear Foot	New Granite Curb Type VA-4 (Straight and Curved) (\$ _____) Per Linear Foot Dollars	\$ _____
2524.3.2.2	440	Linear Foot	New Granite Transition Curb for Pedestrian Ramps (Straight and Curved) (\$ _____) Per Linear Foot Dollars	\$ _____
2577.1	1030	Linear Foot	4-in to 8-in ReflectORIZED Pavement Markings – Yellow & White Thermoplastic (\$ _____) Per Linear Foot Dollars	\$ _____

Bidder's Name _____

Item #	Estimated Quantity	Units	ITEM DESCRIPTION Description of the Work and Unit Price Bid Written in Words and Numbers	Amount
2577.2	950	Linear Foot	12-in ReflectORIZED Pavement Markings – White Thermoplastic (\$ _____) Per Linear Foot Dollars	\$ _____
2604.1	20	EA	Catch Basin – Type I Single Grate (4-ft Diameter) (\$ _____) EA Dollars	\$ _____
2604.2	10	EA	Catch Basin – Type II Double Grate (5-ft Diameter) (\$ _____) EA Dollars	\$ _____
2604.2	3	EA	Catch Basin – Type III Single Grate (3x4-ft Diameter) (\$ _____) EA Dollars	\$ _____
2615.3	1440	Linear Foot	Pipe – DI (Gravity) 12-inch (\$ _____) Per Linear Foot Dollars	\$ _____
2615.4	15	Linear Foot	Pipe – DI (Gravity) 15-inch (\$ _____) Per Linear Foot Dollars	\$ _____

Bidder's Name _____

Item #	Estimated Quantity	Units	ITEM DESCRIPTION Description of the Work and Unit Price Bid Written in Words and Numbers	Amount
2615.5	280	Linear Foot	Pipe – DI (Gravity) 24-inch (\$ _____) Per Linear Foot Dollars	\$ _____
2615.6	470	Linear Foot	Pipe – DI (Gravity) 30-inch (\$ _____) Per Linear Foot Dollars	\$ _____
2615.7	100	Linear Foot	Pipe – DI (Gravity) 36-inch (\$ _____) Per Linear Foot Dollars	\$ _____
2615.8	650	Linear Foot	Pipe – DI (Gravity) 42-inch (\$ _____) Per Linear Foot Dollars	\$ _____
2615.9.1	10	Each	FKM (VITON) Gaskets for DI<36" (Gravity) (\$ _____) Each Dollars	\$ _____
2615.9.2	95	Each	NBR (Nitrile) Gaskets for DI≥36" (Gravity) (\$ _____) Each Dollars	\$ _____

Bidder's Name _____

ITEM DESCRIPTION					
Item #	Estimated Quantity	Units	Description of the Work and Unit Price Bid Written in Words and Numbers	Amount	
2622.1	952	Linear Foot	Relocate Existing Sanitary Services in Conflict With the Proposed Work or Reinstale Existing Sanitary Services (\$ _____) Per Linear Foot _____ Dollars	\$ _____	
2622.3	640	Linear Foot	Pipe – PVC (Gravity) 8-inch (\$ _____) Per Linear Foot _____ Dollars	\$ _____	
2622.4	1500	Linear Foot	Pipe – PVC (Gravity) 10-inch (\$ _____) Per Linear Foot _____ Dollars	\$ _____	
2622.5	220	Linear Foot	Pipe – PVC (Gravity) 12-inch (\$ _____) Per Linear Foot _____ Dollars	\$ _____	
2622.8	95	Each	FKM (VITON) Gaskets for PVC (Gravity) (\$ _____) Each _____ Dollars	\$ _____	

Bidder's Name _____

Item #	Estimated Quantity	Units	ITEM DESCRIPTION Description of the Work and Unit Price Bid Written in Words and Numbers	Amount
2630.2	1514	Linear Foot	Pipe – DI (Water) 8-inch (\$ _____) Per Linear Foot _____ Dollars	\$ _____
2630.4	95	Each	FKM (VITON) Gaskets for DI (Water) (\$ _____) Each _____ Dollars	\$ _____
2640.1	5	Each	6-in Gate Valve and Gate Box (\$ _____) Each _____ Dollars	\$ _____
2640.2	20	Each	8-in Gate Valve and Gate Box (\$ _____) Each _____ Dollars	\$ _____
2645.1	2	Each	New Hydrant (\$ _____) Each _____ Dollars	\$ _____
2645.2	2	Each	Remove and Dispose Existing Hydrant (\$ _____) Each _____ Dollars	\$ _____

Bidder's Name _____

ITEM DESCRIPTION				Amount
Item #	Estimated Quantity	Units	Description of the Work and Unit Price Bid Written in Words and Numbers	
2645.3	5	Each	Remove and Relocate Existing Hydrant (\$ _____) Each _____ Dollars	\$ _____
2647.1	10	Each	Connection To Existing Water Mains (\$ _____) Each _____ Dollars	\$ _____
2660.1	652	Linear Foot	½-in to 3-in Water Service Replacement (\$ _____) Per Linear Foot _____ Dollars	\$ _____
2660.2	33	Each	Tie Over Existing Water Service to New Water Main (\$ _____) Each _____ Dollars	\$ _____
2675.1	1	Lump Sum	Disinfection of Water Mains (\$ _____) Per Lump Sum _____ Dollars	\$ _____
2685.1	250	Linear Foot	Pipe – Temporary By-Pass Piping (\$ _____) Per Linear Foot _____ Dollars	\$ _____

Bidder's Name _____

Myrtle/Magnolia
Addendum No. 1

FORM FOR GENERAL BID
00300ADD1-16

ITEM DESCRIPTION					
Item #	Estimated Quantity	Units	Description of the Work and Unit Price Bid Written in Words and Numbers	Amount	
2699.1.1	4	Each	Separate Roof Drain at Basement Ceiling (\$ _____) Each _____ Dollars	\$ _____	
2699.1.2	2	Each	Separate Roof Drain at Basement Floor Slab (\$ _____) Each _____ Dollars	\$ _____	
2699.1.3	3	Each	Separate Sump Pump Discharge (\$ _____) Each _____ Dollars	\$ _____	
2704.1	1670	Linear Foot	Pipe Pressure and Internal Inspection (\$ _____) Per Linear Foot _____ Dollars	\$ _____	
2761.1	1	Lump Sum	Flow By-Pass (\$ _____) Per Lump Sum _____ Dollars	\$ _____	
2800.1	20	Each	Connections to Existing Structures (\$ _____) Each _____ Dollars	\$ _____	

Bidder's Name _____

Myrtle/Magnolia
Addendum No. 1

FORM FOR GENERAL BID
00300ADD1-17

Item #	Estimated Quantity	Units	ITEM DESCRIPTION Description of the Work and Unit Price Bid Written in Words and Numbers	Amount
2910.1	1	Each	Tree Planting (\$ _____) Per Linear Foot _____ Dollars	\$ _____
2950.1	1100	Square Foot	Non-Standard Back of Sidewalk Restoration (\$ _____) Per Square Foot _____ Dollars	\$ _____
15252.1.2	1	Each	12-in Flap Gate (\$ _____) Each _____ Dollars	\$ _____

Bidder's Name _____

Myrtle/Magnolia
Addendum No. 1

FORM FOR GENERAL BID
00300ADD1-18

Total amount of **BASE BID** based on Engineer's estimate of quantities for Items 920.101 through 2910.1, inclusive:

(Amount in Words)

(Amount in Figures)

Also write the amount of the BID, in words and numbers, in the spaces provided for the on Page 00300-2 of the Form for General Bid.

Basis of Award will be on the prices bid for Base Bid at the sole discretion of the Owner.

Bidder's Name _____

F. The undersigned agrees if selected as General Contractor, within ten (10) working days after presentation thereof by the City, the Contractor will:

1. Execute a contract in accordance with the terms of this general bid;
2. Furnish a performance bond and a labor and materials or payment bond;
 - a. of a surety company qualified to do business under the laws of the Commonwealth and satisfactory to the City;
 - b. in the sum of one hundred percent of the contract price;
 - c. premiums for each are to be paid by the General Contractor.
3. provide an Insurance certificate specifying the City of Cambridge; S E A Consultants Inc; and MWH Americas, Inc as **Additional Insured**, complying with the Insurance requirements set forth herein in the General Terms and Conditions of the contract, Article 8.

G. Bidder understands that the Owner reserves the right to reject any or all bids and to waive any minor informalities in the bidding prices.

H. Amounts are to be shown in both words and figures. In case of discrepancy, the amount shown in words will govern.

I. The bidder hereby certifies it shall comply with the minority workforce ratios and specification contained in the Cambridge Employment Plan, the Cambridge Responsible Employer Plan, the Living Wage Ordinance, the Supplemental Equal Employment Opportunity Program, the Americans with Disabilities Act, and the MWRA WBE Participation Plan. The contractor receiving the award of the contract shall be required to obtain from each of its subcontractors and submit to the contracting or administering agency prior to the performance of any work under said contract a certification by said subcontractor, regardless of tier, that it will comply with same.

J. The bidder agrees that this bid shall be good and may not be withdrawn for a period of 90 days after the scheduled closing time for receiving bids.

K. The bid security attached in the sum of _____
_____ (\$ _____) is to become the property of the Owner in the event the contract and bond are not executed within the time above set forth, as liquidated damages for the delay and additional expense to the Owner caused thereby.

Bidder's Name _____

The undersigned certifies that it possesses the skill, ability and integrity necessary for the faithful performance of the work; that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least- 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and who, where the provisions of section 8B of chapter 29 apply, shall have been determined to be qualified thereunder; and who obtains within 10 days of the notification of contract award the security by bond required under section 29 of chapter 149; provided that for the purposes of this section the term "security by bond" shall mean the bond of a surety company qualified to do business under the laws of the commonwealth and satisfactory to the awarding authority.

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the "person" shall mean any natural person, joint venture, business, partnership, corporation, or other business or legal entity.

"I certify under the penalties of perjury that I have complied with all of the laws of the Commonwealth of Massachusetts relating to taxes, reporting of employees and contractors, and withholding and remitting child support".

The undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the Commonwealth under the provisions of section twenty-nine F of chapter twenty-nine, or any other applicable debarment provision of any other chapter of the General Laws or any rule or regulation promulgated thereunder.

Date _____

BY: _____
(Signature)

(Name of General Bidder)

(Title)

(Business Address)

(City and State)

- END OF SECTION 00300ADD1 -

Bidder's Name _____

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Bidder's Name _____

Myrtle/Magnolia
Addendum No. 1

FORM FOR GENERAL BID
00300ADD1-22

SECTION 00310ADD1

CITY OF CAMBRIDGE, MASSACHUSETTS

BID BOND

We, the undersigned _____ as Principal, and _____ as Surety, are hereby held and firmly bound unto the CITY OF CAMBRIDGE, a municipality in the County of Middlesex and Commonwealth of Massachusetts, in the penal sum of _____ Dollars (\$ _____), for the payment of which, well and truly to be made. We hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

Signed this _____ day of _____, _____.

THE CONDITION OF THE ABOVE OBLIGATION is such that whereas the Principal has submitted to the City of Cambridge, Massachusetts, a certain bid attached hereto and hereby made a part hereof to enter into a contract in writing for the Cambridge, Massachusetts, Myrtle/Magnolia Drainage Improvement Project.

If the Principal fails to perform their agreement to execute a contract and furnish a performance bond and a labor and materials or payment bond as stated in their bid in accordance with the applicable state statute or fails in all other respects to perform the agreement created by the acceptance of said bid, their bid deposit shall become and be the property of the City of Cambridge as liquidated damages.

If said Bid shall be rejected because of death, disability, bona fide clerical or mechanical error of a substantial nature, or other similar unforeseen circumstances affecting the Principal, their bid bond shall be returned to their.

The Surety, for value received, hereby agrees that its obligations and its bond shall in no way be impaired or affected by an extension of the time in which the City of Cambridge may accept such bid and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

CONTRACTOR AS PRINCIPAL

SURETY

(Signature)

(Signature)

Name and Title:

Name and Title:

SEAL

SEAL

- END OF SECTION 00310ADD1 -

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SECTION 00311

MBE FORMS (CITY OF CAMBRIDGE)

MINORITY BUSINESS ENTERPRISE REQUIREMENTS

GENERAL

On June 30, 1983 the City of Cambridge put into effect a city wide Minority Business Enterprise (MBE) Program. To comply with the requirements of this program, a general contractor must submit the appropriate MBE Forms with its bid. The process is explained below. Failure to meet the requirements may result in automatic disqualification of the bidder. Upon request or upon its own initiative, the City may grant an extension of time for submission of the appropriate MBE Forms. Extensions shall be granted only upon a finding by the City that the bidder's failure to submit the appropriate MBE forms was excusable.

PROCEDURE

Steps you should take to comply with the City's MBE requirements are as follows:

1. Secure a copy of the State Office Minority and Women Business Assistance (SOMWBA) Certified Minority/Women Business Directory. Only MBE firms approved by SOMWBA will be accepted by the City of Cambridge.
2. Attempt to develop a bid that includes at least ten percent (10%) of your total bid price in the form of work subcontracted to (or materials purchased from) one or more Minority Businesses.
3. To make the attempt to secure at least 10% Minority business participation, you (the General Contractor) must contact as many of the subcontractors or suppliers in the SOMWBA directory as necessary. Please note that MBE FORM #3 – CONTRACT REQUEST-FOR-EXTENSION and MBE FORM #4 – INFORMATION ON UNSUCCESSFUL MBE CONTACT require you to provide a list of each firm contacted and other related information.
4. If you are successful in securing 10% or more Minority Businesses participation, you must:
 - A. Complete and submit MBE FORM #1 – CONTRACTOR CERTIFICATION OF COMPLIANCE.
 - B. Have your participating Minority Business each fill out MBE FORM #2 – LETTER OF INTENT TO PARTICIPATE, to be submitted with your bid.
5. If, after contacting all SOMWBA-approved firms in the trades or materials categories you should include in your bid, you have not been able to secure 10% Minority business participation, then complete and submit with your bid MBE FORM #3 – CONTRACTOR REQUEST FOR EXTENSION and MBE FORM #4 – INFORMATION ON UNSUCCESSFUL MBE CONTRACT.

If you have any questions about the above steps, please call Duane Brown, Minority Business Compliance Officer, at 349-4332.

MINORITY BUSINESS ENTERPRISE PROGRAM COMPLIANCE DETAILS

PERCENTAGE OF MBE PARTICIPATION - percentage of MBE participation shall be that percentage of the total bid price represented by the amount to be paid to MBE(s). The General Bidder's compliance with the percentage requirement shall continue to be determined by reference to the above-described method throughout the term of the contract, even though the actual project price may be greater or less than the bid price. The General Bidder shall submit to the Minority Business Compliance Officer signed copies of its subcontracts with all MBE's involved in meeting the percentage of Minority Business Enterprise Requirement.

ROLE OF THE MBE REVIEW COMMITTEE - The MBE Review Committee shall have referred to it by the Purchasing Agent and the Minority Business Compliance Officer all questions of interpretation of the MBE Program that arise during the Program's operation. The MBE Review Committee shall have the responsibility and authority to respond with binding answers to these questions. It also has the responsibility and authority to recommend to the City Manager whatever improvements it believes can be made in the program, based on operating experience.

CHANGES OF MBE STATUS - Any change or substitution of the officers or stockholders in a participating MBE company that reduces the minority ownership or control to less than the requisite percentage will immediately rescind the MBE designation given by SOMWBA. The General Bidder (Prime Contractor) shall immediately notify the Minority Business Compliance Officer upon learning of such a change in MBE status. In this event, the Prime Contractor shall submit to the Minority Business Compliance Officer a revised Contractor Certification of Compliance with MBE Requirements, showing how the lost MBE participation will be replaced.

SANCTIONS

- A. If the Prime Contractor does not comply with the terms of the Minority Business Enterprise requirements of the contract, the City may (1) suspend any payment for the activity that should have been performed by the MBE pursuant to the contract, or (2) require specific performance of the Prime Contractor's obligation by requiring the Prime Contractor to subcontract with any MBE for any contract or specialty item at the contract price established for that item in the proposal submitted by the Prime Contractor.
- B. To the extent that the Prime Contractor has not complied with the MBE requirements of the contract, the City may retain an amount determined by multiplying the bid price of this contract by the required percentage of MBE participation, less the amount of paid to MBEs for work performed under the contract and any payments already suspended under "A" above.
- C. In addition, or as an alternative, to the remedies under "A" and "B" above, the City may suspend, terminate or cancel this contract, in whole or in part, or may call upon the Prime Contractor's surety to perform all terms and conditions in the contract, unless the Prime Contractor is able to demonstrate its compliance with the MBE requirements, and may further deny to the Prime Contractor the right to participate in any future contracts awarded by the City for a period of up to three years.
- D. In any proceeding involving the imposition of sanctions by the City, no sanctions shall be imposed if the City finds that the Prime Contractor has taken every possible measure to comply with MBE requirements, or that some other justifiable reason exists for waiving the MBE requirements in whole or in part.
- E. Any bidder or contractor shall provide such information as is necessary in the judgment of the City to ascertain its compliance with the MBE Requirements.
- F. No sanctions shall be imposed by the City except in an adjudicatory proceeding under Chapter 30A of the General Laws.
- G. A Prime Contractor shall have the right to request suspension of any sanctions imposed by the City upon showing that it is once again in compliance with the MBE Requirements.

**FORM
1
M.B.E.**

CONTRACTOR CERTIFICATION OF COMPLIANCE

Minority Business Enterprise Requirements

Name and Address of Participating Minority Bus. Enterprise	Name of Participant	Dollar Value
1.		
2.		
3.		
4.		
5.		
6.		
7.	GRAND TOTAL FOR MINORITY BUSINESS COMMITMENT	
	\$ _____	
8.	PERCENTAGE MBE PARTICIPATION (Line 7 Divided by total bid price) _____%	

The below-signed bidder certifies that it will honor the above Minority Business Enterprise Commitment and that it understands that a breach of this commitment constitutes a breach of the contract.

Date

General Contractor

Authorized Signature

Business Address

LETTER OF INTENT TO PARTICIPATE

Minority Business Enterprise Requirements

TO: _____
(Name of General Bidder)

1. My company intends to perform work under the above-identified contract as:

- _____ an individual
- _____ a partnership
- _____ a corporation
- _____ a joint venture with _____
- _____ other (explain) _____

2. My company has been certified by the State Office of Minority and Women Business Assistance (SOMWBA) as a Minority Business Enterprise and is listed as such in the most recently issued SOMWBA Minority/Women Business Directory. I hereby certify that my company's qualification as a Minority Business Enterprise have not changed since its application was submitted to SOMWBA. I further certify that my company will give immediate notification in writing to both SOMWBA and your Company in the event that its minority ownership, control, or management should change.

3. My company understands that if your company is awarded the contract, your company intends to enter into an agreement with my company to perform the activity described below for the prices indicated. My firm also understands that your firm, as General Bidder, will make substitutions and quantity changes only as allowed or required by the provisions of the contract with the City of Cambridge.

ITEM NO.	DESCRIPTION OF MY COMPANY'S ACTIVITY*	QUANTITY	UNIT PRICE	AMOUNT

TOTAL AMOUNT \$ _____

* Description of activity should include notations such as "Labor Only", "Material Only", etc.

Date

MBE Name

MBE Authorized Signature

Business Address

CONTRACTOR REQUEST FOR EXTENSION

Minority Business Enterprise Requirements

CONTRACTOR REQUEST-FOR-EXTENSION OF MINORITY BUSINESS ENTERPRISE
REQUIREMENTS

The below signed General Bidder certifies that it made a good faith effort to develop the required ten percent (10%) Minority Business Enterprise participation in this contract, but was able to develop only _____%.

The below-signed General Bidder further certifies that it contacted the below-listed firms from the SOMWBA MINORITY/WOMEN BUSINESS DIRECTORY that said contacts were bona fide efforts to develop the required Minority Business Enterprise participation in the above-identified contract but were unsuccessful due to circumstances beyond the control of the General Bidder; and that the information given on the following pages about each contract has made is accurate and complete.

MBE Companies Contacted

- | | |
|----------|-----------|
| 1. _____ | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

The below-signed General Bidder therefore requests that the City of Cambridge grant an extension of ten working days in order to provide the General Bidder an opportunity to secure the required percentage of Minority Business participation.

Date

General Contractor

Authorized Signature

Business Address

FORM

4

M.B.E.

INFORMATION ON UNSUCCESSFUL M.B.E. CONTACT
Minority Business Enterprise Requirements

Additional copies of this information form shall be prepared by the General Bidder in the quantity necessary to comply with bidding requirements.

ITEM NUMBER ON REQUEST-FOR-EXTENSION _____

NAME OF MBE COMPANY CONTACTED _____

ADDRESS OF COMPANY CONTACTED _____

TELEPHONE NO. OF COMPANY CONTACTED _____

DATE OF INITIAL CONTACT _____

HOW WAS CONTACT MADE? (Check appropriate answer) TELEPHONE _____
IN-PERSON _____

SUB-CONTRACT WORK OFFERED TO THIS MBE COMPANY _____

RESULT OF CONTACT (check appropriate answer) MBE Firm Declined Job _____;
MBE Firm offered to do job at price of \$ _____, which was determined by our company to be too high _____; MBE offered to do the job at a price of \$ _____, which was satisfactory, but the MBE company was judged by our company to be unqualified for the job _____

NAME AND TITLE OF THE MBE COMPANY OFFICER WHO CAN VERIFY ABOVE INFORMATION AS TO MBE COMPANY'S RESPONSE

It is certified herewith by the below-signed officer of the General Bidder that the above information is accurate and complete.

Date

General Contractor

Authorized Signature

Business Address

- END OF SECTION 00311ADD1 -

SECTION 00312ADD1

STATEMENT OF BIDDER'S QUALIFICATIONS

All questions must be answered and the data given must be clear and comprehensive. **This statement must be notarized.** If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information it desires.

1. The names, titles, residences of all persons and parties interested in this Proposal as principals are as follows:

Note: Give the first and last names in full. In the case of corporation, give names of officers and directors; in the case of a partnership, give names of all partners.

IMPORTANT: Be sure residences are listed below.

Name	Title	Home Address
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

2. When organized.

3. If a corporation, where incorporated.

4. Does the firm have at least ten (10) years of experience in:

A. The construction and rehabilitation of sewerage and drainage systems under your present firm or trade name?

Bidder's Name: _____

B. The reconstruction of roadways and Architectural Access Board compliant sidewalks under your present firm or trade name?

C. The construction and rehabilitation of municipal sewerage and drainage systems under your present firm or trade name?

D. The reconstruction of municipal roadways and Architectural Access Board compliant sidewalks under your present firm or trade name?

5. What projects similar to this one is your organization currently performing? Provide the following information:

Name and Address of Owner for Whom Work is Being Done	Whether Work Being Done as Contractor or Sub-contractor	Description of Work	Approximate Amount of Contract	Approximate Completion Date of Work
---	---	---------------------	--------------------------------	-------------------------------------

Bidder's Name: _____

6. What is the general nature of work normally performed by your company?

7. Has your present organization ever failed to complete any work awarded to it? If so, state when, where, and why.

8. Has your present organization ever defaulted on a contract? If so, state when, where, and why.

9. What project has your present organization completed of character similar to that proposed? Provide the following information:

Name and Address of Owner for Whom Work is Being Done	Whether Work Being Done as Contractor or Sub-contractor	Description of Work	Approximate Amount of Contract	Approximate Completion Date of Work
---	---	---------------------	--------------------------------	-------------------------------------

Bidder's Name: _____

10. Qualification Requirements – As a minimum, the Bidder must demonstrate that it is qualified to bid on this Contract by adequately providing responses to the following 6 qualification requirements:

Qualification Requirement No 1:

Within the last 10 years, the Contractor must have successfully completed at least 3 projects involving, as a minimum, the construction of water mains, sanitary sewers, storm drains, streets and sidewalks within a crowded urban setting on state highways with heavy volumes of motor vehicle, bicycle, pedestrian and handicap traffic that required coordination and rerouting of traffic and transportation with MBTA, and with state and city police, fire, parking, traffic and handicap compliance departments. The dollar value of each project must have been at least 5 million dollars.

Project #1-1:

Project Name: _____

Start date: _____ Completion date: _____

Name of Owner for Whom the Work was done: _____

Name of Owner's Representative (for Reference): _____

Owner's Representative's Telephone #: _____

Dollar Value of Project #1-1 Contract: _____

State highway and City impacted in urban setting: _____

Description of work performed that demonstrates that the above requirements have been fulfilled:

Project # 1-2:

Project Name: _____

Start date: _____ Completion date: _____

Name of Owner for Whom the Work was done: _____

Bidder's Name: _____

Name of Owner's Representative (for Reference): _____

Owner's Representative's Telephone #: _____

Dollar Value of Project #1-2 Contract: _____

State highway and City impacted in urban setting: _____

Description of work performed that demonstrates that the above requirements have been fulfilled:

Project # 1-3:

Project Name: _____

Start date: _____ Completion date: _____

Name of Owner for Whom the Work was done: _____

Name of Owner's Representative (for Reference): _____

Owner's Representative's Telephone #: _____

Dollar Value of Project #1-2 Contract: _____

State highway and City impacted in urban setting: _____

Description of work performed that demonstrates that the above requirements have been fulfilled:

Qualification Requirement No 2:

Bidder's Name: _____

Within the last 10 years, the Contractor must have successfully completed at least 3 projects which implemented trenchless technologies for sewer and drain rehabilitation, including Cured In Place Pipe Lining and/or pipe bursting. The dollar value of each project must have been at least 1 million dollars.

Project #2-1:

Project Name: _____

Start date: _____ Completion date: _____

Name of Owner for Whom the Work was done: _____

Owner's Representative's Telephone #: _____

Dollar Value of Project #2-1 Contract: _____

City & streets where trenchless sewer rehabilitation work was completed: _____

Description of work performed that demonstrates that the above requirements have been fulfilled:

Project #2-2

Project Name: _____

Start date: _____ Completion date: _____

Name of Owner for Whom the Work was done: _____

Name of Owner's Representative (for Reference): _____

Owner's Representative's Telephone #: _____

Dollar Value of Project #2-2 Contract: _____

City & streets where trenchless sewer rehabilitation work was completed: _____

Description of work performed that demonstrates that the above requirements have been fulfilled:

Bidder's Name: _____

Project #2-3

Project Name: _____

Start date: _____ Completion date: _____

Name of Owner for Whom the Work was done: _____

Name of Owner's Representative (for Reference): _____

Owner's Representative's Telephone #: _____

Dollar Value of Project #2-2 Contract: _____

City & streets where trenchless sewer rehabilitation work was completed: _____

Description of work performed that demonstrates that the above requirements have been fulfilled:

Qualification Requirement No 3:

Within the last 10 years, the Contractor must have successfully completed at least 3 projects that demonstrated sensitivity to community issues, which could include but is not limited to designation of a community liaison, attendance at community meetings, and compliance with OSHA construction standards. The dollar value of each project must have been at least 1 million dollars.

Project #3-1:

Project Name: _____

Start date: _____ Completion date: _____

Name of Owner for Whom the Work was done: _____

Name of Owner's Representative (for Reference): _____

Bidder's Name: _____

Owner's Representative's Telephone #: _____
Dollar Value of Project #3-1 Contract: _____

Description of work performed that demonstrates that the above requirement has been fulfilled:

Project #3-2:

Project Name: _____
Start date: _____ Completion date: _____
Name of Owner for Whom the Work was done: _____

Name of Owner's Representative (for Reference): _____
Owner's Representative's Telephone #: _____
Dollar Value of Project #3-2 Contract: _____

Description of work performed that demonstrates that the above requirement has been fulfilled:

Project #3-3:

Project Name: _____
Start date: _____ Completion date: _____
Name of Owner for Whom the Work was done: _____

Name of Owner's Representative (for Reference): _____
Owner's Representative's Telephone #: _____
Dollar Value of Project #3-3 Contract: _____

Description of work performed that demonstrates that the above requirement has been fulfilled:

Bidder's Name: _____

11. Describe equipment available for the performance of this contract by setting forth make, model and year, size, number, and type for each such piece of equipment (a) owned, (b) currently rented or (c) to be rented. Bidder must set forth description of all equipment it plans to use whether rented or owned.

(a) Owned

(b) Rented

12. Background and experience of the principal member of your organization, including the officers.

Bidder's Name: _____

13. Who will be the contractor's on site project manager ? State such person's qualifications. Also list names of employees who will be participating in this contract and their qualifications (years of experience, etc.).

14. Indicate name of all sub-contractors that will be working on this project.

15. Give below the name and address of one or more banks which have information that would enable them to advise regarding the financial ability of your company.

Name of Bank

Address

16. Federal Identification No.

17. Name, Signature, and Title of officer preparing this proposal.

Name _____

Signature _____

Title _____

18. The undersigned hereby authorizes and requests any person, firm or corporation to furnish any information requested by the Cambridge Department of Public Works in verification of the recitals comprising this Statement of Bidder's Qualifications.

Dated at _____ this _____ day of _____, 20__

Bidder's Name: _____

(Signature)

Tel. No. _____

BY _____

Title _____

State of _____)

as:

County of _____)

_____, being duly sworn,

deposes and says that he is

_____ of

(Name of Organization)

and that the answers to the foregoing questions and all statements therein contained are true and correct.

Subscribed and sworn to before me this _____ day of _____,
20__

(Notary Public)

My commission expires on _____, 20__

- END OF SECTION 00312ADD1 -

Bidder's Name: _____

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Bidder's Name: _____

Myrtle/Magnolia
Addendum No. 1

STATEMENT OF BIDDER'S QUALIFICATIONS
00312ADD1-12

SECTION 00313ADD1
GENERAL CONTRACTOR'S CERTIFICATION

General Contractor's Certification

A contractor will not be eligible for award of a contract unless such contractor has submitted the following certification, which is deemed a part of the resulting contract:

GENERAL CONTRACTOR'S CERTIFICATION

_____ (General Contractor) certifies that:

1. it shall obtain from each of its subcontractors and submit to the contracting or administering agency prior to the performance of any work under said subcontract a certification by each subcontractor, regardless of tier, that it will comply with the Minority/Women/Resident workforce ratio;
2. it read, understands and shall comply with the Minority/Women/Resident hiring requirements set forth in the Cambridge Employment Plan, Cambridge Municipal Code 2.66.060, et seq.;
3. it is aware that failure to comply with the Cambridge Employment Plan will result in, at minimum, the following: 1) it will be ineligible to bid for future contracts with the City of Cambridge, and 2) the City of Cambridge will notify DCAM of such failure which may affect the contractor's future qualification to bid for public contracts throughout the Commonwealth;
4. it has read, understands and shall comply with all the pertinent provisions of the Americans with Disabilities Act and will be subject to sanctions for failure to do so;
5. it has read, understands and shall comply with all the provisions of the Supplemental Equal Employment Opportunity Anti-Discrimination and Affirmative Action Program and will be subject to sanctions for failure to do so.

Signed under the penalties of perjury.

Signature of authorized representative of contractor

Print name of authorized representative of contractor

Dated

SUBMIT THIS FORM WITH YOUR BID

- END OF SECTION 00313ADD1 -

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SECTION 00315ADD1
PROJECTED WORKFORCE CERTIFICATION

THIS FORM MUST BE SUBMITTED WITH YOUR BID

PROJECTED WORKFORCE CERTIFICATION

I, _____

Certify that the following is my projected workforce for this contract:

GENERAL CONTRACTOR	ESTIMATED # OF NEW HIRES

SUBTRADE	ESTIMATED # OF NEW HIRES

Signed under penalties of perjury,

General Contractor

- END OF SECTION 00315ADD1 -

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SECTION 00316ADD1
CREP GENERAL CONTRACTOR'S CERTIFICATION FORM

CAMBRIDGE RESPONSIBLE EMPLOYER PLAN

GENERAL CONTRACTOR'S CERTIFICATION - BID FORM

_____ hereby certifies that it, (Name of General Bidder)
and all its subcontractors who are not filed sub bidders shall:

- (1) comply with the Cambridge Employment Plan as it currently exists and as it may be, from time to time, amended, and specifically shall comply with the worker hours requirements of §2.66.060(A);
- (2) comply with the obligations established under M.G.L. c.149 and G.L. c30§39M to pay the appropriate lawful prevailing wage rates to its employees;
- (3) maintain or participate in a bona fide apprentice training program as defined by c.23 §§ 11H and 11I for each apprenticeable trade or occupation represented in its workforce that is approved by the Division of Apprentice Training of the Department of Labor and Industries and shall abide by the apprentice to journeymen ratio for each trade prescribed therein in the performance of the contract;
- (4) furnish, at its expense, hospitalization and medical benefits for all its employees employed on the project and/or coverage at least comparable in value to the hospitalization and medical benefits provided by the health and welfare plans in the applicable craft recognized by M.G.L. c.149, §26 and G.L. c30§39M in establishing minimum wage rates;
- (5) maintain appropriate industrial accident insurance coverage for all its employees employed on the project in accordance with M.G.L. c.152;
- (6) properly classify employees as employees rather than independent contractors and treat them accordingly for purposes of workers' compensation insurance, unemployment taxes, social security taxes and income tax withholding; and
- (7) certify under oath and in writing on a weekly basis for the entire duration of its work on the project, that it is in compliance with the above obligations.

Signed under the penalties of perjury. _____ (date)

Signature of authorized representative of contractor

Print name of authorized representative of contractor

**THIS CERTIFICATE APPLIES ONLY TO GENERAL BIDS OVER \$100,000 INCLUDING
ALL ALTERNATES, IF ANY.**

RETURN THIS FORM WITH YOUR BID

- END OF SECTION 00316ADD1 -

SECTION 00317ADD1

CREP GENERAL CONTRACTOR'S CERTIFICATION – WEEKLY FORM

Project: _____

Contract#: _____

**CAMBRIDGE RESPONSIBLE EMPLOYER PLAN
GENERAL CONTRACTOR'S CERTIFICATION - WEEKLY CONTRACT FORM**

_____ hereby certifies that it, (Name of General Contractor)
and all its subcontractors who are not filed sub bidders:

(1) are complying with the Cambridge Employment Plan as it currently exists and as it may be, from time to time, amended, and specifically are complying with the worker hours requirements of §2.66.060(A);

(2) are complying with the obligations established under M.G.L. c.149 and G.L. c30§39M to pay the appropriate lawful prevailing wage rates to its employees;

(3) are maintaining or participating in a bona fide apprentice training program as defined by c.23 §§ 11H and 11I for each apprenticeable trade or occupation represented in its workforce that is approved by the Division of Apprentice Training of the Department of Labor and Industries and are abiding by the apprentice to journeymen ratio for each trade prescribed therein in the performance of the contract;

(4) are furnishing, at its expense, hospitalization and medical benefits for all its employees employed on the project and/or coverage at least comparable in value to the hospitalization and medical benefits provided by the health and welfare plans in the applicable craft recognized by M.G.L.c.149, §26 and G.L. c30§39M in establishing minimum wage rates;

(5) are maintaining appropriate industrial accident insurance coverage for all its employees employed on the project in accordance with M.G.L. c.152; and

(6) are properly classifying employees as employees rather than independent contractors and treat them accordingly for purposes of workers' compensation insurance, unemployment taxes, social security taxes and income tax withholding.

The General Contractor certifies under oath that it is in compliance with the above obligations.

Signed under the penalties of perjury, week of: _____ (date)

Signature of authorized representative of contractor

Print name of authorized representative of contractor

**THIS FORM MUST BE SUBMITTED TO THE CITY OF CAMBRIDGE
PURCHASING DEPARTMENT ON A WEEKLY BASIS FOR THE LIFE OF THE
PROJECT**

- END OF SECTION 00317ADD1 -

SECTION 00322ADD1
CORI COMPLIANCE FORM

CORI COMPLIANCE FORM

Persons and businesses supplying goods and/or services to the City of Cambridge ("Vendors"), who are required by law to perform CORI checks, are further required by Section 2.112.060 of the Cambridge Municipal Code to employ fair policies, practices and standards relating to the screening and identification of persons with criminal backgrounds through the CORI system. Such Vendors, when entering into contracts with the City of Cambridge, must affirm that their policies, practices and standards regarding CORI information are consistent with the policies, practices and standards employed by the City of Cambridge as set forth in the City of Cambridge CORI Policy ("CORI Policy") attached hereto.

CERTIFICATION

The undersigned certifies under penalties of perjury that the Vendor employs CORI related policies, practices and standards that are consistent with the provisions of the attached CORI Policy. **All Vendors must check one of the three lines below.**

1. _____ CORI checks are not performed on any Applicants.
2. _____ CORI checks are performed on some or all Applicants. The Vendor, by affixing a signature below, affirms under penalties of perjury that its CORI policies, practices and standards are consistent with the policies, practices and standards set forth in the attached CORI Policy.
3. _____ CORI checks are performed on some or all Applicants. The Vendor's CORI policies, practices and standards are not consistent with the attached CORI Policy. Please explain on a separate sheet of paper.

(Typed or printed name of person
signing quotation, bid or Proposal)

Signature

(Name of Business)

NOTE:

The City Manager, in his sole discretion may grant a waiver to any Vendor on a contract by contract basis.

Instructions for Completing CORI Compliance Form:

A Vendor should not check Line 1 unless it performs NO CORI checks on ANY applicant. A Vendor who checks Line 2 certifies that the Vendor's CORI policy conforms to the policies, practices and standards set forth in the City's CORI Policy. A Vendor with a CORI policy that does NOT conform to the City's CORI Policy must check Line 3 and explain the reasons for its nonconformance in writing. Vendors, who check Line 3, will not be permitted to enter into contracts with the City, absent a waiver by the City Manager.

This form must be submitted with your bid

- END OF SECTION 00322ADD1 -

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SECTION 00323ADD1
OSHA GENERAL CONTRACTOR CERTIFICATION FORM

Chapter 306 of the Acts of 2004
An Act Relative to the Health and Safety on Construction Projects

GENERAL CONTRACTOR'S CERTIFICATION - BID FORM

_____ (Name of General Bidder) hereby certifies that it, and all its subcontractors who are not filed sub bidders shall:

- (1) who shall certify that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is a least 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee.

Signed under the penalties of perjury. _____(date)

Signature of authorized representative of contractor

Print name of authorized representative of contractor

RETURN THIS FORM WITH YOUR BID

- END OF SECTION 00323ADD1 -

SECTION 02615ADD1

DUCTILE IRON PIPE FOR SANITARY
AND STORM DRAIN GRAVITY AND FORCEMAINS

2615.1	PIPE – DI (GRAVITY) 8-INCH	LINEAR FOOT
2615.2	PIPE – DI (GRAVITY) 10-INCH	LINEAR FOOT
2615.3	PIPE – DI (GRAVITY) 12-INCH	LINEAR FOOT
2615.4	PIPE – DI (GRAVITY) 15-INCH	LINEAR FOOT
2615.5	PIPE – DI (GRAVITY) 24-INCH	LINEAR FOOT
2615.6	PIPE – DI (GRAVITY) 30-INCH	LINEAR FOOT
2615.7	PIPE – DI (GRAVITY) 36-INCH	LINEAR FOOT
2615.8	PIPE – DI (GRAVITY) 42-INCH	LINEAR FOOT
2615.9.1	FKM (VITON) GASKETS FOR DI < 36" (GRAVITY)	EACH
2615.9.2	NBR (NITRILE) GASKETS FOR DI ≥ 36" (GRAVITY)	EACH

PART 1 - GENERAL

1.1 SUMMARY

- A. This section includes the following:
1. Furnishing, installing, and testing ductile-iron pipe and fittings for sanitary and storm drain service, as indicated and specified.
- B. Options:
1. For joints in buried pipelines, provide either push-on, flanged or mechanical-joint as shown on the Drawings. All fittings shall be mechanical joint.
- C. Related sections include the following:
1. Section 02210 – EARTH EXCAVATION, BACKFILL, FILL AND GRADING
 2. Section 02704 – PIPELINE PRESSURE AND LEAKAGE TESTING
 3. Section 03300 - CONCRETE

1.2 SUBMITTALS

A. Shop Drawings: Submit the following in accordance with Section 01300 - SUBMITTAL PROCEDURES:

1. Submit shop drawings or descriptive literature, or both, showing dimensions, joint and other details for each type and class of pipe, fitting and restraint system to be furnished for the project. All materials furnished under the Contract shall be manufactured only in accordance with the Specifications. Submittals shall include material information, dimensions, pipe class information, weights, coating and lining system data.
2. Submit manufacturer's Certificates of Compliance with these Specifications and certification that the ductile iron pipe and fittings have been manufactured and tested in accordance with AWWA/ANSI specifications.
3. Submit a detailed description of proposed testing and flushing procedures to be used for this project. The description shall contain the name of the person responsible for the testing and flushing work, equipment to be used, chemical to be used and method of measuring flow during flushing procedures. Review of the description shall not be construed as approval of any methods to be used, the Contractor shall be fully responsible for achieving the specified test results.

1.3 QUALITY CONTROL

- A. Provide in accordance with Section 01400 – QUALITY CONTROL and as specified.
- B. Owner reserves right to inspect and test by independent service at manufacturer's plant or elsewhere at his own expense.

1.4 DELIVERY, STORAGE AND HANDLING

- A. Provide in accordance with Section 01600 – PRODUCTS, MATERIALS AND EQUIPMENT.

PART 2 - PRODUCTS

2.1 PIPE

- A. Ductile Iron:

1. Ductile iron pipe shall be that of a United States manufacturer who can demonstrate at least 5 years of successful experience in manufacturing ductile iron pipe. The pipe shall be equipped with push-on type, restrained joint, or mechanical joints, as required.
2. All ductile iron pipe shall conform to ANSI A21.50 (1976) (AWWA C150) and ANSI A21.51 (AWWA C151).
3. The ductile iron pipe shall be Pressure Class 350 and furnished in nominal 18-foot lengths, with Push-on, Flanged, or Mechanical Joints as manufactured by U.S. Pipe and Foundry Company, Griffin Pipe Co., Clow Corporation, or equal with gaskets conforming to AWWA C111 ANSI A21.11 "Rubber Gasket Joints". For gasket material see 2.3 GASKET MATERIALS below.
4. The ductile iron pipe shall be double cement lined inside and then asphalt seal coated on the outside and inside approximately 1 mil. thick. The cement lining shall conform to AWWA C104 ANSI A21.4. The pipe shall be furnished along with necessary materials and equipment recommended by the manufacturer for use in joining pipe lengths and fittings.

2.2 FITTINGS

- A. Fittings shall be compact ductile iron Class 350 Mechanical Joint, conforming to ANSI Specification A21.53 (AWWA C153), latest edition, for pipe sizes 16-inches and smaller, and Class 350 standard Mechanical Joint fittings conforming to AWWA C110/ANSI A21.10, latest edition except as specified, for pipe sizes 16 through 24-inches, unless specifically stated otherwise in the specifications or on the drawings. Fittings shall be suitable for use with restraints as specified hereinafter. Fittings shall be manufactured in the United States. Fittings shall be of the same material and have the same lining and coating as the pipe specified above. All fittings shall be marked with the weight and shall have distinctly cast upon them the pressure rating, the manufacturer's identification, nominal diameter of openings and the number of degrees or fraction of the circle on all bends.
 1. Caps and plugs installed in all new work as indicated on the drawings shall be provided with a threaded corporation or bleeder valve so that air and water pressure can be relieved prior to future connection.
 2. Solid sleeves shall be ductile iron with 350 psi rating. Sleeves shall conform to ANSI/AWWA C110.

2.3 GASKET MATERIALS

- A. Push-on and mechanical joint gaskets for the full length of Myrtle Avenue (station 30+00 to 36+00) for DI < 36" (GRAVITY) shall be FKM (Viton) Gaskets or equal gasket acceptable for use in an environment with perchloroethylene and tetrachloroethene and their subsequent derivatives.
- B. Push-on and mechanical joint gaskets for the remainder of the project shall be Nitrile (NBR) (Acrylonitrile Butadiene) or equal gasket acceptable for use in an environment which will handle fats, oils and greases unless otherwise noted or approved.
- C. Push-on and mechanical joint gaskets for the full length of Myrtle Avenue (station 30+00 to 36+00) for DI ≥ 36" (GRAVITY) shall be Nitrile (NBR) (Acrylonitrile Butadiene) Gaskets or equal gasket acceptable for use in an environment with perchloroethylene and tetrachloroethene and their subsequent derivatives.

2.4 ADAPTERS

- A. Furnish and install for joining pipe of different types, unless solid sleeves indicated.
 - 1. Provide ends conforming to above specifications for appropriate type of joint, to receive adjoining pipe.

2.5 JOINTS

- A. Provide mechanical joint, flanged or push-on joint pipe with necessary accessories, conforming to ANSI A21.11.
- B. Restrained joints for force mains shall be furnished for installation on all fittings, sleeves, and valves. Restraints for mechanical joints shall be Series 1100 Megalug as manufactured by Ebaa Iron Co., MJ Field Lok Gasket as manufactured by US Piping Company, Uni-flanged Series 1400 Mechanical Joint Restraint or equal.
- C. Restraints for force main for push-on joints shall be Series 1700 as manufactured by Ebaa Iron Co., or Series 1390 as manufactured by Uni-Flange. Restraint systems for push-on pipe utilizing steel-wedge gaskets will be acceptable.

2.6 STANDARD LINING AND COATING

- A. Inside of pipe and fittings: Provide double thickness cement lining and bituminous seal coat conforming to ANSI A21.4.

- B. Outside of pipe and fittings within structures: Clean and apply one shop coat of Koppers Pug Primer made by Koppers Co., Inc., Pittsburgh, PA; Chem-Prime 37-77 made by Tnemec Co., North Kansas City, MD; 13-R-50 Chromax Primer made by Valspar Corp. Short Hills, NJ; or acceptable equivalent.
- C. Outside of other pipe and fittings: Standard bituminous coating conforming to appropriate ANSI Standard.

PART 3 - EXECUTION

3.1 HANDLING PIPE

- A. The Contractor shall take care not to damage pipe by impact, bending, compression, or abrasion during handling, and installation. Joint ends of pipe especially shall be kept clean.
- B. Pipe shall be stored above ground at a height no greater than 5 feet, and with even support for the pipe barrel.
- C. Only nylon-protected slings shall be used for handling the pipe. No hooks or bare cables will be permitted.
- D. Gaskets shall be shipped in cartons and stored in a clean area, away from grease, oil, heat, direct sunlight and ozone producing electric motors.

3.2 ALIGNMENT AND PLACEMENT OF PIPE

- A. Jointing of ductile iron pipe and fittings shall be done in accordance with the printed recommendations of the manufacturer and as specified. The last 8-inches of the outside of the spigot end of pipe and the inside of the bell end of pipe shall be thoroughly cleaned. The joint surfaces and the gasket shall be painted with a lubricant just prior to making up the joint. The spigot end shall then be gently pushed home into the bell. The position of the gasket shall be checked to insure that the joint has been properly made and is watertight. Care shall be taken not to exceed the manufacturer's recommended maximum deflection allowed for each joint.
- B. Installation and jointing of push-on ductile iron pipe shall be in accordance with AWWA C600 Sections 9b and 9c, latest revision, as applicable.
- C. Mechanical joints on force mains shall be installed with Mega-Lug, Uni-Flange or MJR restraints. Restraints shall be installed in full accordance with the manufacturers' instructions. All bolt heads on Mega-Lugs or Uni-flanged shall be tightened sufficiently so that they shear off to provide

indication that proper tightening torque was achieved.

- D. Restrained push-on joints for force mains shall be installed with specified gasket joint restraints. Restraints shall be installed in full accordance with the manufacturers' instructions.
- E. Fittings and valves shall be restrained as shown on the drawings.

3.3 INSTALLATION

A. Piping Support:

1. Furnish and install supports to hold piping at lines and grades indicated or specified.
2. Support pipe and appurtenances connected to equipment to prevent any strain imposed on equipment.

B. Pipe and Fittings:

1. Remove and replace defective pieces.
2. Clear of all debris and dirt before installing and keep clean until accepted.
3. Lay accurately to lines and grades indicated or required. Provide accurate alignment, both horizontally and vertically.
4. Provide firm bearing along entire length of buried pipelines.

C. Appurtenances: Set valves, fittings and appurtenances as indicated.

3.4 JOINTS AND COUPLINGS

A. Push-on Joints:

1. Insert gasket into groove bell. Apply thin film of nontoxic gasket lubricant over inner surface of gasket in contact with spigot end.
2. Insert chamfered end into gasket. Force pipe past it until it seats against socket bottom.
3. Where required install restraint and secure in accordance with manufacturer's instructions.

B. Mechanical Joints:

1. Wire brush surfaces in contact with gasket and clean gasket.
2. Lubricate gasket, bell, and spigot with soapy water.
3. Slip gland and gasket over spigot, and insert spigot into bell until seated.
4. Seat gasket and press gland firmly against gasket.
5. After bolts inserted and nuts made finger-tight, tighten diametrically opposite nuts progressively and uniformly around joint by torque wrench. Torque bolts to values specified above.

3.5 TESTING

- A. Clean of all dirt, dust, oil, grease and other foreign material, before conducting pressure and leakage tests.
- B. Gravity lines shall be tested in accordance with Specification Section 02622.3.1 C, D, and E

3.6 CONTRACT CLOSEOUT

- A. Provide in accordance with Section 01701 – PROJECT CLOSEOUT.

PART 4 – COMPENSATION

Item 2615.1 - Pipe – DI (Gravity) 8-inch

METHOD OF MEASUREMENT:

Measurement for payment for Pipe – DI (Gravity) 8-inch will be based on the actual linear feet of pipe installed, tested, and accepted, complete as shown on the Contract Drawings or as required by the Engineer and as measured by the Engineer along the centerline of the pipe from the inside face of structures to inside face of structures or to the points of connection with existing pipes.

Pipe installed but not successfully tested and accepted shall be paid for at a maximum of 95 percent of the unit prices bid under this item. The remaining 5 percent shall be paid upon receipt of successful test results by the Engineer. All reductions in payment due to unsuccessful testing shall be made prior to normal retainage.

BASIS OF PAYMENT:

Payment for Pipe – DI (Gravity) 8-inch will be based on the unit price bid for this item in the proposal. Under the linear foot price for the item, the Contractor shall furnish all labor, materials, tools, equipment, and incidentals required to install each pipe complete as shown on the Contract Drawings or at the requirements of the Engineer. The work includes, but is not limited to; saw cutting bituminous and cement; excavation; furnishing and placing backfill per one of the approved methods; furnish, install and compact gravel road sub-base; furnish and install filter fabric as required; compaction; compaction testing; temporary excavation support furnished and installed complete, left in place, and cut off below grade where required or required; bedding; furnish and install ductile iron pipe, couplings, fittings, adaptors, restraints, transitions, gaskets and appurtenances; connections to existing and proposed pipes and structures; flushing and testing; dye testing to verify proper service connections; and all incidental work not specifically included for payment elsewhere.

Item 2615.2 - Pipe – DI (Gravity) 10-inch

METHOD OF MEASUREMENT:

Measurement for payment for Pipe – DI (Gravity) 10-inch will be based on the actual linear feet of pipe installed, tested, and accepted, complete as shown on the Contract Drawings or as required by the Engineer and as measured by the Engineer along the centerline of the pipe from the inside face of structures to inside face of structures or to the points of connection with existing pipes.

Pipe installed but not successfully tested and accepted shall be paid for at a maximum of 95 percent of the unit prices bid under this item. The remaining 5 percent shall be paid upon receipt of successful test results by the Engineer. All reductions in payment due to unsuccessful testing shall be made prior to normal retainage.

BASIS OF PAYMENT:

Payment for Pipe – DI (Gravity) 10-inch will be based on the unit price bid for this item in the proposal. Under the linear foot price for the item, the Contractor shall furnish all labor, materials, tools, equipment, and incidentals required to install each pipe complete as shown on the Contract Drawings or at the requirements of the Engineer. The work includes, but is not limited to; saw cutting bituminous and cement; excavation; furnishing and placing backfill per one of the approved methods; furnish, install and compact gravel road sub-base; furnish and install filter fabric as required; compaction; compaction testing; temporary excavation support furnished and installed complete, left in place, and cut off below grade where required or required; bedding; furnish and install ductile iron pipe, couplings, fittings, adaptors, restraints, transitions, gaskets and appurtenances; connections to existing and proposed pipes and structures; flushing and testing; dye testing to verify proper service connections; and all incidental work not specifically included for payment elsewhere.

Item 2615.3 - Pipe – DI (Gravity) 12-inch

METHOD OF MEASUREMENT:

Measurement for payment for Pipe – DI (Gravity) 12-inch will be based on the actual linear feet of pipe installed, tested, and accepted, complete as shown on the Contract Drawings or as required by the Engineer and as measured by the Engineer along the centerline of the pipe from the inside face of structures to inside face of structures or to the points of connection with existing pipes.

Pipe installed but not successfully tested and accepted shall be paid for at a maximum of 95 percent of the unit prices bid under this item. The remaining 5 percent shall be paid upon receipt of successful test results by the Engineer. All reductions in payment due to unsuccessful testing shall be made prior to normal retainage.

BASIS OF PAYMENT:

Payment for Pipe – DI (Gravity) 12-inch will be based on the unit price bid for this item in the proposal. Under the linear foot price for the item, the Contractor shall furnish all labor, materials, tools, equipment, and incidentals required to install each pipe complete as shown on the Contract Drawings or at the requirements of the Engineer. The work includes, but is not limited to; saw cutting bituminous and cement; excavation; furnishing and placing backfill per one of the approved methods; furnish, install and compact gravel road sub-base; furnish and install filter fabric as required; compaction; compaction testing; temporary excavation support furnished and installed complete, left in place, and cut off below grade where required or required; bedding; furnish and install ductile iron pipe, couplings, fittings, adaptors, restraints, transitions, gaskets and appurtenances; connections to existing and proposed pipes and structures; flushing and testing; dye testing to verify proper service connections; and all incidental work not specifically included for payment elsewhere.

Item 2615.4 - Pipe – DI (Gravity) 15-inch

METHOD OF MEASUREMENT:

Measurement for payment for Pipe – DI (Gravity) 15-inch will be based on the actual linear feet of pipe installed, tested, and accepted, complete as shown on the Contract Drawings or as required by the Engineer and as measured by the Engineer along the centerline of the pipe from the inside face of structures to inside face of structures or to the points of connection with existing pipes.

Pipe installed but not successfully tested and accepted shall be paid for at a maximum of 95 percent of the unit prices bid under this item. The remaining 5 percent shall be paid upon receipt of successful test results by the Engineer. All reductions in payment due to unsuccessful testing shall be made prior to normal retainage.

BASIS OF PAYMENT:

Payment for Pipe – DI (Gravity) 15-inch will be based on the unit price bid for this item in the proposal. Under the linear foot price for the item, the Contractor shall furnish all labor, materials, tools, equipment, and incidentals required to install each pipe complete as shown on the Contract Drawings or at the requirements of the Engineer. The work includes, but is not limited to; saw cutting bituminous and cement; excavation; furnishing and placing backfill per one of the approved methods; furnish, install and compact gravel

road sub-base; furnish and install filter fabric as required; compaction; compaction testing; temporary excavation support furnished and installed complete, left in place, and cut off below grade where required or required; bedding; furnish and install ductile iron pipe, couplings, fittings, adaptors, restraints, transitions, gaskets and appurtenances; connections to existing and proposed pipes and structures; flushing and testing; dye testing to verify proper service connections; and all incidental work not specifically included for payment elsewhere.

Item 2615.5 - Pipe – DI (Gravity) 24-inch

METHOD OF MEASUREMENT:

Measurement for payment for Pipe – DI (Gravity) 24-inch will be based on the actual linear feet of pipe installed, tested, and accepted, complete as shown on the Contract Drawings or as required by the Engineer and as measured by the Engineer along the centerline of the pipe from the inside face of structures to inside face of structures or to the points of connection with existing pipes.

Pipe installed but not successfully tested and accepted shall be paid for at a maximum of 95 percent of the unit prices bid under this item. The remaining 5 percent shall be paid upon receipt of successful test results by the Engineer. All reductions in payment due to unsuccessful testing shall be made prior to normal retainage.

BASIS OF PAYMENT:

Payment for Pipe – DI (Gravity) 24-inch will be based on the unit price bid for this item in the proposal. Under the linear foot price for the item, the Contractor shall furnish all labor, materials, tools, equipment, and incidentals required to install each pipe complete as shown on the Contract Drawings or at the requirements of the Engineer. The work includes, but is not limited to; saw cutting bituminous and cement; excavation; furnishing and placing backfill per one of the approved methods; furnish, install and compact gravel road sub-base; furnish and install filter fabric as required; compaction; compaction testing; temporary excavation support furnished and installed complete, left in place, and cut off below grade where required or required; bedding; furnish and install ductile iron pipe, couplings, fittings, adaptors, restraints, transitions, gaskets and appurtenances; connections to existing and proposed pipes and structures; flushing and testing; dye testing to verify proper service connections; and all incidental work not specifically included for payment elsewhere.

Item 2615.6 - Pipe – DI (Gravity) 30-inch

METHOD OF MEASUREMENT:

Measurement for payment for Pipe – DI (Gravity) 30-inch will be based on the actual linear feet of pipe installed, tested, and accepted, complete as shown on the Contract Drawings or as required by the Engineer and as measured by the Engineer along the centerline of the pipe from the inside face of structures to inside face of structures or to the points of connection with existing pipes.

Pipe installed but not successfully tested and accepted shall be paid for at a maximum of 95 percent of the unit prices bid under this item. The remaining 5 percent shall be paid upon receipt of successful test results by the Engineer. All reductions in payment due to unsuccessful testing shall be made prior to normal retainage.

BASIS OF PAYMENT:

Payment for Pipe – DI (Gravity) 30-inch will be based on the unit price bid for this item in the proposal. Under the linear foot price for the item, the Contractor shall furnish all labor, materials, tools, equipment, and incidentals required to install each pipe complete as shown on the Contract Drawings or at the requirements of the Engineer. The work includes, but is not limited to; saw cutting bituminous and cement; excavation; furnishing and placing backfill per one of the approved methods; furnish, install and compact gravel road sub-base; furnish and install filter fabric as required; compaction; compaction testing; temporary excavation support furnished and installed complete, left in place, and cut off below grade where required or required; bedding; furnish and install ductile iron pipe, couplings, fittings, adaptors, restraints, transitions, gaskets and appurtenances; connections to existing and proposed pipes and structures; flushing and testing; dye testing to verify proper service connections; and all incidental work not specifically included for payment elsewhere.

Item 2615.7 - Pipe – DI (Gravity) 36-inch

METHOD OF MEASUREMENT:

Measurement for payment for Pipe – DI (Gravity) 36-inch will be based on the actual linear feet of pipe installed, tested, and accepted, complete as shown on the Contract Drawings or as required by the Engineer and as measured by the Engineer along the centerline of the pipe from the inside face of structures to inside face of structures or to the points of connection with existing pipes.

Pipe installed but not successfully tested and accepted shall be paid for at a maximum of 95 percent of the unit prices bid under this item. The remaining 5 percent shall be paid upon receipt of successful test results by the Engineer. All reductions in payment due to unsuccessful testing shall be made prior to normal retainage.

BASIS OF PAYMENT:

Payment for Pipe – DI (Gravity) 36-inch will be based on the unit price bid for this item in the proposal. Under the linear foot price for the item, the Contractor shall furnish all labor, materials, tools, equipment, and incidentals required to install each pipe complete as shown on the Contract Drawings or at the requirements of the Engineer. The work includes, but is not limited to; saw cutting bituminous and cement; excavation; furnishing and placing backfill per one of the approved methods; furnish, install and compact gravel road sub-base; furnish and install filter fabric as required; compaction; compaction testing; temporary excavation support furnished and installed complete, left in place, and cut off below grade where required or required; bedding; furnish and install ductile iron pipe, couplings, fittings, adaptors, restraints, transitions, gaskets and appurtenances; connections to existing and proposed pipes and structures; flushing and testing; dye

testing to verify proper service connections; and all incidental work not specifically included for payment elsewhere.

Item 2615.8 - Pipe – DI (Gravity) 42-inch

METHOD OF MEASUREMENT:

Measurement for payment for Pipe – DI (Gravity) 42-inch will be based on the actual linear feet of pipe installed, tested, and accepted, complete as shown on the Contract Drawings or as required by the Engineer and as measured by the Engineer along the centerline of the pipe from the inside face of structures to inside face of structures or to the points of connection with existing pipes.

Pipe installed but not successfully tested and accepted shall be paid for at a maximum of 95 percent of the unit prices bid under this item. The remaining 5 percent shall be paid upon receipt of successful test results by the Engineer. All reductions in payment due to unsuccessful testing shall be made prior to normal retainage.

BASIS OF PAYMENT:

Payment for Pipe – DI (Gravity) 42-inch will be based on the unit price bid for this item in the proposal. Under the linear foot price for the item, the Contractor shall furnish all labor, materials, tools, equipment, and incidentals required to install each pipe complete as shown on the Contract Drawings or at the requirements of the Engineer. The work includes, but is not limited to; saw cutting bituminous and cement; excavation; furnishing and placing backfill per one of the approved methods; furnish, install and compact gravel road sub-base; furnish and install filter fabric as required; compaction; compaction testing; temporary excavation support furnished and installed complete, left in place, and cut off below grade where required or required; bedding; furnish and install ductile iron pipe, couplings, fittings, adaptors, restraints, transitions, gaskets and appurtenances; connections to existing and proposed pipes and structures; flushing and testing; dye testing to verify proper service connections; and all incidental work not specifically included for payment elsewhere.

Item 2615.9.1 – FKM (Viton) Gaskets for DI < 36" (Gravity)

METHOD OF MEASUREMENT:

FKM (Viton) Gasket for DI < 36" (Gravity) shall be paid per FKM (Viton) Gasket for DI (Gravity) installed complete regardless of pipe size.

BASIS OF PAYMENT / INCLUSIONS:

FKM (Viton) Gasket for DI < 36" (Gravity) shall be based on the unit price bid for this item in the proposal. Under the Unit Price for this item, the Contractor shall furnish all labor, materials, tools, equipment, and incidentals required for the complete installation of FKM (Viton) Gasket for DI < 36" (Gravity) regardless of pipe size, as shown and indicated in the Contract Documents, at the requirements of the Engineer and as specified.

Item 2615.9.2 – NBR (Nitrile) Gaskets for DI ≥ 36" (Gravity)

METHOD OF MEASUREMENT:

NBR (Nitrile) Gasket for DI \geq 36" (Gravity) shall be paid per NBR (Nitrile) Gasket for DI (Gravity) installed complete regardless of pipe size.

BASIS OF PAYMENT / INCLUSIONS:

NBR (Nitrile) Gasket for DI \geq 36" (Gravity) shall be based on the unit price bid for this item in the proposal. Under the Unit Price for this item, the Contractor shall furnish all labor, materials, tools, equipment, and incidentals required for the complete installation of NBR (Nitrile) Gasket for DI \geq 36" (Gravity) regardless of pipe size, as shown and indicated in the Contract Documents, at the requirements of the Engineer and as specified.

- END OF SECTION 02615ADD1 -