

ADDENDUM NO. 1

Project: Kyte Monroe Stormwater Improvements Project

Date Issued: August 6, 2015

Bid Opening Date: August 10, 2015

To: Prospective Bidders

From: City of St. Clair Shores

This Addendum is issued to modify the Specifications and to clarify information for prospective bidders for the above referenced project as follows:

Item 1 – Alternate- Paver Pattern

The Bid Form and Section 01025 Measurement and Payment have been modified to include an alternate paver pattern (Herringbone). The revised Bid Form and Section 01025 Measurement and Payment are included in this Addendum.

Replace the Bid Form with the attached revised Bid Form.

Replace Section 01025 Measurement and Payment with the attached revised Section 01025 Measurement and Payment.

Item 2- Bidder Questions

The following are questions received from a prospective bidder:

Question 1: “What bid item covers the excavation required for the paver system?”

Response 1: The excavation required for the installation of the paver system is covered under Item 19. Porous Pavement System/ Pavers.

Question 2: “What does Item 16. Pavement Base and Subgrade Repairs include?”

Response 2: This item is for all labor, material and equipment required to perform grading and replacement of gravel at existing parking lot to meet finished grades for the asphalt pavement area. Section 01025 Measurement and Payment has been revised to clarify this item. The revised Section 01025 is included in this Addendum.

Replace Section 01025 Measurement and Payment with the attached revised Section 01025 Measurement and Payment.

BID FORM

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ARTICLE 1 – BID RECIPIENT

1.01 This Bid is submitted to:

Mary A. Kotowski, City Clerk
City of St. Clair Shores
27600 Jefferson Circle Drive
St. Clair Shores, Michigan 48081-2093

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 – BIDDER’S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 – BIDDER’S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

A. Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged.

<u>Addendum No.</u>	<u>Addendum Date</u>
_____	_____
_____	_____
_____	_____

B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions that may affect cost, progress, and performance of the Work.

C. Bidder is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress and performance of the Work.

D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been identified in SC-4.02, and (2) reports and drawings of Hazardous Environmental Conditions that have been identified in SC-4.06.

E. Bidder has obtained and carefully studied (or accepts the consequences for not doing so) all additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents to be employed by Bidder, and safety precautions and programs incident thereto.

- F. Bidder does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents.
- I. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.
- J. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.
- K. Bidder will submit written evidence of its authority to do business in the state where the Project is located not later than the date of its execution of the Agreement.

ARTICLE 4 – FURTHER REPRESENTATIONS

4.01 Bidder further represents that:

- A. this Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over Owner.

ARTICLE 5 – BASIS OF BID

5.01 The undersigned, having familiarized himself with the local conditions affecting the cost of the work and with the Contract Documents for the designated project, hereby proposes to perform all work and furnish all labor, tools, equipment, and materials, including utility and transportation services, necessary to perform and complete in a workmanlike manner the construction itemized below in the City of St. Clair Shores, all in accordance with the Drawings, Specifications and other Contract Documents at the unit prices hereinafter set forth. **There is a Minority (MBE) contractor’s participation grant requirement of 2% and a Women (WBE) contractor’s participation grant requirement of 6% for this project.**

Item	Description	Unit	Estimated Quantity	Bid Unit Price	Bid Price
1	Mobilization	LS	1		
2	Construction Staking	LS	1		
3	Soil Erosion and Sediment Control	LS	1		
4	As-Built Survey and Drawings	LS	1		
5	Remove/ Relocate Existing Bumper Blocks	EA	37		
6	Existing Concrete Removal and Disposal	SY	20		
7	Connection to Existing Storm Structure	LS	1		
8	6" Perforated Pipe	LF	1,000		
9	8" Perforated Pipe UnderDrain	LF	90		
10	2' Storm Sewer Catch Basin	EA	2		
11	2' Storm Sewer Overflow Structure	EA	4		
12	4' Storm Sewer Overflow Structure	EA	1		
13	Concrete Curb & Gutter	LF	95		
14	Concrete Header	LF	820		
15	Concrete Sidewalk	SY	550		
16	Pavement Base and Subgrade Repairs	CY	1,000		
17	Aggregate Base, 6"	SY	1,500		
18	Asphalt Paving, 3"	TON S	1,300		
19	Porous Pavement System / Pavers	SF	15,000		
20	Bio Swale	SF	3,650		
21	Upland Seed	AC	0.10		
22	Shrubs	EA	25		
23	Vegetation Maintenance	Mos	6		
24	Parking Lot Striping and Pavement Markings	LF	7,000		
25	Bumper Blocks	EA	102		
26	Directional Parking Signs	EA	3		
27	Handicap Parking Signs	EA	6		

28	Existing Utility Investigation	LS	1		
29	Existing Utility Relocation	LF	100		
30	Site Restoration	LS	1		
Allowances					
31	Plants	LS	1		\$ 5,000.00
32	Interpretive Sign	LS	1		\$ 3,000.00
33	Unforeseen Site Conditions	LS	1		\$ 20,000.00

Total (Numerical): _____

Total (Words): _____

One of the following Bid Alternate Adds may be chosen to replace line item 19 Porous Pavement System/ Pavers. If an Alternate is chosen, it will be at the discretion of the Owner and will depend on Item Cost as well as product aesthetics and function. .

Bid Alternates					
A1	Porous Pavement System / Pavers- Herringbone	SF	15,000		

Unit Prices have been computed in accordance with Paragraph 11.03.B of the General Conditions.

Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 6 – TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete on or before November 30, 2015, and will be completed and ready for final payment in accordance with Paragraph 14.07.B of the General Conditions on or before December 30, 2015.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work within the Contract Times.

ARTICLE 7 – ATTACHMENTS TO THIS BID

- 7.01 The following documents are attached to and made a condition of this Bid:
 - A. Required Bid security in the form of _____

ARTICLE 8 – DEFINED TERMS

8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 9 – BID SUBMITTAL

9.01 This Bid submitted by:

If Bidder is:

An Individual

Name (typed or printed): _____

By: _____ (SEAL)
(Individual's signature)

Doing business as: _____

A Partnership

Partnership Name: _____ (SEAL)

By: _____
(Signature of general partner – attach evidence of authority to sign)

Name (typed or printed): _____

A Corporation

Corporation Name: _____ (SEAL)

State of Incorporation: _____
Type (General Business, Professional, Service, Limited Liability): _____

By: _____
(Signature – attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____
(CORPORATE SEAL)

Attest: _____
(Signature of Corporate Secretary)

Date of Qualification to do business in _____ *[State Where Project is Located]* is ____________.

A Joint Venture

Name of Joint Venturer: _____

First Joint Venturer Name: _____ (SEAL)

By: _____

(Signature of first joint venture partner – attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Second Joint Venturer Name: _____ (SEAL)

By: _____

(Signature of second joint venture partner – attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

Bidder's Business address: _____

Phone: _____ Facsimile: _____

Submitted on _____, 20____.

State Contractor License No. _____. (If applicable)

SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SCOPE OF WORK

This section describes the method of measurement and basis of payment for all items of work included in the Contract and listed in the Bid Form. The CONTRACTOR shall provide all labor, material, tools, equipment and services required to complete the Work as specified and as indicated on the Drawings. Permits may be required for the completion of the Work of this Contract. All necessary permitting shall be incidental to the cost of the Work. Testing may be required to verify compliance with the Contract Documents. All necessary testing shall be at cost to the Contractor, and therefore, shall be included in the cost to complete the Work as specified here within. THE OWNER ONLY WILL PAY FOR ITEMS ON THE BID FORM, AND WILL MAKE NO PAYMENT FOR ITEMS NOT INCLUDED ON THE BID FORM.

1.02 RELATED WORK

- A. Bid Form.
- B. Section 01010, Summary of Work.
- C. Section 01020, Allowances.
- D. Section 01310, Work Plan.

1.03 PAYMENT ITEMS

GENERAL

ITEM NO. 1 - Mobilization

Mobilization will be paid for at the Contract lump sum (L.S.) amount (not to exceed 5% of the total Contract Price). Price paid shall be payment in full for all labor, material, and equipment necessary for all preparatory work and operations, including but not limited to, the movement of personnel, equipment, supplies, and incidentals to the project site. Mobilization shall also include preconstruction costs, including permit fees and premiums for insurance and bonds, exclusive of bidding costs, which are necessary direct costs to the project and are of a generalized nature rather than directly attributable to other pay items under this Contract. This pay item shall also include all costs associated with De-Mobilization. This pay item shall include:

- Furnish and install grant required project sign;
- the establishment of staging/storage areas;

- the establishment of temporary park parking area w/curb access
- the establishment of construction facilities and temporary controls;
- obtaining and permit fee for all necessary SESC and/or other permits required for construction;
- installation and maintenance of construction fencing;
- installation of soil erosion and sedimentation controls;
- preparation of schedules and submittals (including Work Plan and Technical Work Plans);
- other work and operations which must be performed or for expenses incurred, prior to beginning work;
- Traffic Control as needed; and
- All costs associated with De-Mobilization.

Payment for mobilization will be based upon the following schedule:

Partial Payment Schedule

<u>Percentage of Total Contract Price Earned</u>	<u>Percentage of Bid Price for Mobilization Allowed</u>
5	50
10	75
25	100

ITEM NO. 2 – Construction Staking

Construction Staking will be paid for at the Contract lump sum (L.S.) amount. Price paid shall be payment in full for all labor, material and equipment required for staking and maintaining staking in the project area as required to provide site control, control grading, and all other site activities during all stages of the Work in order to construct the project within the boundaries shown on the Plans and in conformance with the Contract Documents.

ITEM NO. 3 – Soil Erosion and Sediment Control

All soil erosion and sediment control items will be paid for at the Contract lump sum (L.S.) amount. Price paid shall be payment in full for all labor, material and equipment required for providing soil erosion and sediment control measures in the project area as required to provide adequate protection from site runoff through sheet flow and/or into structures, and all other site activities, during all stages of the Work in order to construct the project within the boundaries shown on the Plans and in conformance with the Contract Documents.

ITEM NO. 4 –As-Built Survey and Drawings

As-Built Survey and Drawings will be paid for at the Contract lump sum (L.S.) amount. Price paid shall be payment for all labor, material, and equipment required for complete and submit as-built documents at completion of the work and shall

include, but is not limited to:

- supply one set of marked up working drawings as marked up in the field during construction;
- supply three hard copies of as-built documents as conducted by a Professional Engineer or Surveyor;
- supply one digital copy of as-built survey as conducted by a Professional Engineer or Surveyor; and,
- all other items necessary to complete the work.

ITEM NO. 5 – Remove / Relocate Existing Concrete Bumper Blocks

This item will be paid for at the Unit Price (EA) per block amount. Existing bumper blocks shall be removed prior to demolition activities and stored on-site at approved location by the Owner. This item also includes modifying existing blocks to allow for stormwater pass through during storm events, which shall include (2) channels to be cut out of blocks, per Engineer's direction. Modified concrete bumper blocks will then be relocated by on-site per Owner/Engineer direction. Price paid shall be payment for all labor, material, and equipment required for block removal, storage, modification, and relocating on-site, as well as all other items necessary to complete the work.

ITEM NO. 6 – Existing Concrete Removal and Disposal

Existing Concrete Removal and Disposal will be paid for at the Unit Price per Square Yard (S.Y.) of material amount. Price paid shall be payment in full for all labor, material and equipment required to perform concrete demolition, removal and disposal to the extent shown on the Drawings or as directed by the ENGINEER and shall include but is not limited to:

- soil erosion and sedimentation control;
- saw cutting existing materials adjacent to removal areas for clean cut;
- working around and/or adjustment of existing fences/gates to access removal areas as shown on the plans;
- removal and disposal of existing concrete pads;
- removal and disposal of existing concrete approaches;
- haul and legal disposal of demolition materials; and
- all other items necessary to complete the work.

ITEM NO. 7 – Connection to Existing Storm Structures

Connection to Existing Storm Sewer Structures shall be paid for under the Unit Price Each (EA), per connection. This item includes payment for all labor, materials, and equipment required to furnish materials and perform the connection to existing storm sewer manholes / catch basins, as shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- soil erosion and sedimentation controls;
- protection of existing improvements;
- protection of existing utilities;
- trench excavation;
- furnish and installation and compaction of backfill;

- connection and sealing of all proposed storm pipe to existing storm structures;
- furnish and installation of any fittings;
- provide certification and testing services as required;
- furnish and place compacted aggregate base; and
- all other items necessary to complete the work.

ITEM NO. 8 – 6” Perforated Pipe Underdrain

Proposed 6” Perforated Pipe shall be paid for by the Unit Price per Linear Foot (L.F.) amount. Price paid shall be payment in full for all labor, material and equipment required to furnish and perform the installation of the 6” HDPE perforated storm sewer pipe to the extent shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- soil erosion and sedimentation controls;
- protection of existing improvements;
- protection of existing utilities;
- trench excavation;
- furnish and placement and compaction of pipe bedding;
- furnish and placement of 6” HDPE storm sewer pipe;
- furnish and installation and compaction of backfill;
- connection and sealing of all proposed 6” storm pipe to storm structures;
- furnish and installation of any fittings;
- provide certification and testing services as required;
- furnish and place compacted aggregate base; and
- all other items necessary to complete the work.

ITEM NO. 9 – 8” Perforated Pipe Underdrain

Proposed 8” Perforated Pipe shall be paid for by the Unit Price per Linear Foot (L.F.) amount. Price paid shall be payment in full for all labor, material and equipment required to furnish and perform the installation of the 8” HDPE perforated storm sewer pipe to the extent shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- soil erosion and sedimentation controls;
- protection of existing improvements;
- protection of existing utilities;
- trench excavation;
- furnish and placement and compaction of pipe bedding;
- furnish and placement of 8” HDPE storm sewer pipe;
- furnish and installation and compaction of backfill;
- connection and sealing of all proposed 8” storm pipe to storm structures;
- furnish and installation of any fittings;
- provide certification and testing services as required;
- furnish and place compacted aggregate base; and
- all other items necessary to complete the work.

ITEM NO. 10 – 2' Storm Sewer Catch Basin

Proposed 2' Storm Sewer Catch Basin shall be paid for by the Unit Price per Each (EA) catch basin. Price paid shall be payment in full for all labor, material and equipment required to furnish and perform the installation of the 24" storm sewer catch basins to the extent shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- soil erosion and sedimentation controls;
- protection of existing improvements;
- protection of existing utilities;
- trench excavation;
- furnish and placement and compaction of structure bedding;
- furnish and placement of 2' structure;
- furnish and installation and compaction of backfill;
- connection and sealing of all proposed 2' storm structures;
- furnish and installation of any fittings;
- provide certification and testing services as required;
- furnish and place compacted aggregate base; and
- all other items necessary to complete the work.

ITEM NO. 11 – 2' Storm Sewer Overflow Structure

Proposed 2' Storm Sewer Overflow Structure shall be paid for by the Unit Price per Each (EA) Overflow Structure. Price paid shall be payment in full for all labor, material and equipment required to furnish and perform the installation of the 2' storm sewer overflow structures within the bioswale areas to the extent shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- soil erosion and sedimentation controls;
- protection of existing improvements;
- protection of existing utilities;
- trench excavation;
- furnish and placement and compaction of structure bedding;
- furnish and placement of 2' structure;
- furnish and installation and compaction of backfill;
- connection and sealing of all proposed 2' overflow structures;
- furnish and installation of any fittings;
- provide certification and testing services as required;
- furnish and place compacted aggregate base; and
- all other items necessary to complete the work.

ITEM NO. 12 – 4' Storm Sewer Overflow Structure

Proposed 4' Storm Sewer Overflow Structure shall be paid for by the Unit Price per Each (EA) Overflow Structure. Price paid shall be payment in full for all labor, material and equipment required to furnish and perform the installation of the 4' storm sewer overflow structures within the bioswale areas to the extent shown on

the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- soil erosion and sedimentation controls;
- protection of existing improvements;
- protection of existing utilities;
- trench excavation;
- furnish and placement and compaction of structure bedding;
- furnish and placement of 4' structure;
- furnish and installation and compaction of backfill;
- connection and sealing of all proposed 4' overflow structures;
- furnish and installation of any fittings;
- provide certification and testing services as required;
- furnish and place compacted aggregate base; and
- all other items necessary to complete the work.

ITEM NO. 13 – Concrete Curb and Gutter

Concrete Curb and Gutter shall be paid for under the Unit Price of per Linear Foot (L.F.) amount. Price paid shall be payment in full for all labor, material and equipment required to furnish materials and perform installation of the concrete curb and gutter to the extent shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- soil erosion and sedimentation controls;
- all grading required for the curb and gutter;
- furnish and install compacted subbase and base materials;
- furnish and installation of concrete mix;
- expansion joints;
- curb and gutter installation;
- provide testing services as required; and
- all other items necessary to complete the work.

ITEM NO. 14 – Concrete Header

Concrete Header shall be paid for under the Unit Price per Linear Foot (L.F.) amount. Price paid shall be payment in full for all labor, material and equipment required to furnish materials and perform installation of the concrete header for the pervious pavement parking lot to the extent shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- soil erosion and sedimentation controls;
- all grading required for the walks;
- furnish and install compacted aggregate base/ drainage layer;
- furnish and installation of concrete mix;
- expansion joints;
- header installation;
- provide testing services as required; and
- all other items necessary to complete the work.

ITEM NO. 15 – Concrete Sidewalk

Concrete Sidewalk shall be paid for on a Unit Price per Square Yard (S.Y.) amount. Price paid shall be payment in full for all labor, material and equipment required to furnish materials and perform installation of the concrete sidewalk and approach to the extent shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- soil erosion and sedimentation controls;
- all grading required for the walks;
- furnish and install compacted subbase and base layers;
- furnish and installation of concrete mix;
- expansion joints;
- concrete installation;
- provide testing services as required; and
- all other items necessary to complete the work.

ITEM NO. 16 – Pavement Base and Subgrade Repairs

Pavement Base and Subgrade Repairs will be paid for on a Contract Unit Price per Cubic Yard (C.Y.) amount. Price paid shall be payment in full for all labor, material and equipment required to perform grading and replacement of gravel at existing parking lot to meet finished grades for the asphalt pavement to the extent shown on the Drawings or as directed by the ENGINEER and shall include but is not limited to:

- soil erosion and sedimentation control;
- grade existing gravel parking lot to meet proposed finished grades for asphalt paving;
- coordinate with ENGINEER in the delineation of repair area;
- base and/or sub base removal and legal disposal (as necessary, assume 12" depth);
- haul and legal disposal of demolition materials;
- coordinate with ENGINEER in the inspection of the excavation prior to replacement of material;
- furnish, placement and compaction of new base material (assume 12" thickness);
- provide certification and testing services as required; and
- all other items necessary to complete the work.

ITEM NO. 17 – 6" Aggregate Base Material

6" Aggregate Base Material will be paid for at the Contract Unit Price per Square Yard (S.Y.). Price paid shall be payment in full for all labor, material and equipment required to furnish and perform all activities necessary for proper aggregate base installation to the extent shown on the Drawings, detailed in the Contract Documents, or as directed by the ENGINEER and shall include but is not limited to:

- soil erosion and sedimentation control;
- excavation and disposal of unsuitable base material;
- furnish and install 6" aggregate base material per Specifications;
- grading, compacting and proof rolling of base material for preparation of paving;

- coordination with ENGINEER in the inspection of the proof rolling;
- provide testing services as required; and
- all other items necessary to complete the work.

ITEM NO. 18 – 3” Bituminous Asphalt Paving

Asphalt Paving shall be paid for on a Contract Unit Price by the Tons (Ton). Price paid shall be payment in full for all labor, material, equipment, and testing required to furnish and perform asphalt paving to the extent shown on the Drawings, detailed in the Contract Documents, or as directed by the ENGINEER.

- soil erosion and sedimentation control;
- protection of existing improvements;
- protection of existing utilities;
- paving (3” total thickness; 1-½” MDOT 1300T 20AA OR 36A Top Course, 1-½” MDOT 1100L 20AA Leveling course- per Drawings);
- provide certification and testing services as required; and
- all other items necessary to complete the work.

ITEM NO. 19 – Pervious Pavement- Pavers

Pervious Pavement- Pavers shall be paid for on a Contract Unit Price per Square Foot (S.F.). Price paid shall be payment in full for all labor, material and equipment required to perform installation, to the extent shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- soil erosion and sedimentation controls;
- all excavation, rough and final grading, including ‘stepped’ cross-section for drainage;
- furnish and install geotextile;
- furnish and install bedding sand;
- furnish and install pavers at pattern shown on the Drawings;
- furnish and install joint sand;
- furnish and install curb, gutter, and header curb;
- provide certification and testing services as required
- provide 2-year warranty on product and installation; and
- all other items necessary to complete the work.

ITEM NO. 20 – Bio Swales

Bio Swales shall be paid for on a Contract Unit Price of per Square Foot (S.F.). Price paid shall be payment in full for all labor, material and equipment required to construct the bio-swales to the extent shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- soil erosion and sedimentation control;
- protection of existing improvements;
- protection of existing utilities;
- excavation and grading for bio-swale basin;
- furnish and placement of filter fabric;
- furnish and placement of 6A stone;
- furnish and placement of high-permeability soil;

- furnish and placement of top soil;
- furnish and installation of erosion control blanket;
- provide certification, compaction and testing services as required; and,
- all other items necessary to complete the work.

ITEM NO. 21 – Upland Seed

Upland Seed shall be paid for on a Contract unit price amount per Acre (AC). Price paid shall be payment in full for all labor, material and equipment required to furnish and perform installation of seed, adjacent to the bioswales, to the extent shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- soil erosion and sedimentation controls;
- furnish and installation of seed;
- furnish and installation of erosion control blanket and/or mulch;
- a two-year warranty for plant survivability; and,
- all other items necessary to complete the work.

ITEM NO. 22 – Bio Swale Shrubs

Bio Swale Shrubs shall be paid for on a Contract Unit Price per Each (EA) installed. Price paid shall be payment in full for all labor, material and equipment required to furnish and perform installation of shrubs within and/or adjacent to the bio swales, to the extent shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- soil erosion and sedimentation controls;
- furnish and installation of shrubs;
- furnish and installation of erosion control blanket and/or mulch;
- a two-year warranty for plant survivability; and,
- all other items necessary to complete the work.

ITEM NO. 23 – Vegetation Maintenance

Vegetation Maintenance shall be paid for on a Contract unit price amount per Month (Mos). Price paid shall be payment in full for all labor, material and equipment required to perform vegetation maintenance as needed for remedying conditions during the growing season, to the extent shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- soil erosion and sedimentation controls;
- associated watering;
- invasive species removal; and,
- all other items necessary to complete the work.

ITEM NO. 24 – Parking Lot Striping and Pavement Markings

Pavement Markings shall be paid for on a Contract Lump Sum (L.S.) amount. Price paid shall be payment in full for all labor, material and equipment required to furnish and perform the striping and all other pavement markings for the proposed parking lot, to the extent shown on the Drawings or as directed by the ENGINEER.

ITEM NO. 25 –Concrete Bumper Blocks

The Concrete Bumper Blocks item will be paid for at the Unit Price Each (EA) per block amount. Blocks will match the length of existing blocks on-site and Contractor shall utilize blocks in which the center of the bottom of the blocks are raised slightly to allow for stormwater drainage. Concrete bumper blocks will then be placed on-site per Owner/Engineer direction. Price paid shall be payment for all labor, material, and equipment required for furnishing, storage, and placement on-site, as well as all other items necessary to complete the work.

ITEM NO. 26 – Directional Traffic Signs

Directional Traffic Signs shall be paid for on a Contract Unit Price amount per Each (EA). Price paid shall be payment in full for all labor, material and equipment required to furnish and install the signs, to the extent shown on the Drawings or as directed by the ENGINEER.

ITEM NO. 27 – Handicap Parking Signs

Handicap Parking Signs shall be paid for on a Contract Unit Price amount per Each (EA). Price paid shall be payment in full for all labor, material and equipment required to furnish and install the signs in the west parking lot, to the extent shown on the Drawings or as directed by the ENGINEER.

ITEM NO. 28 – Existing Utility Investigation

Existing Utility Investigation shall be paid for on a Contract lump sum (L.S.) mount. Price paid shall be payment in full for all labor, material and equipment required to investigate the vertical and horizontal location of the existing utilities shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- soil erosion and sedimentation control;
- fiber optic, cable, electric, gas, and telephone line investigation;
- protection of existing improvements;
- protection of existing utilities;
- excavation for investigation of vertical and horizontal location of the electric utility;
- backfill and restoration of site(s) of investigation, as needed, and
- all other items necessary to complete the work.

ITEM NO. 29 – Existing Utility Relocation

Electric Utility Relocation shall be paid for on Contract Unit Price per Linear Foot (L.F.) amount. Price paid shall be payment in full for all labor, material and equipment required to furnish and perform the relocation of any existing utility conflicts to a depth below the proposed subgrade elevation at conflicting locations throughout the proposed parking lot and bioswale areas to the extent shown on the Drawings or as directed by the ENGINEER. Existing utilities shown on Plans shall include, but are not limited to electric, fiberoptic, as, telephone, and cable lines. This task shall include, but is not limited to:

- soil erosion and sedimentation controls;
- protection of existing improvements;

- protection of existing utilities;
- coordination with Owner on disruptions to use;
- relocation of line(s) and conduit as required to accommodate proposed pavement system (below proposed subgrade elevation) and bioswales;
- furnish and installation of any fittings, connections, or junctions; and
- all other items necessary to complete the work.

ITEM NO. 30 - Site Restoration

Site Restoration will be paid for at the Contract lump sum (L.S.) amount. Price paid shall be payment for all labor, material, and equipment required for complete site restoration and shall include but is not limited to:

- grading, furnish and placement of topsoil of disturbed areas
- disking/tilling as necessary to create a suitable seedbed area;
- seeding disturbed areas;
 1. soil testing
 2. furnish and install topsoil
 3. furnish and install seed
 4. furnish and install erosion control measures/mulching
 5. associated watering and fertilizing
- removal temporary fencing/gates;
- removal of construction and silt fencing; and
- cleaning site.

ALLOWANCES

ITEM NO. 31 – Bio Swale Plants

Bio Swale Plants shall be paid for at the actual cost as invoiced by the supplier plus 5%. Price paid shall be payment for all labor, material, and equipment required to purchase, transport and maintain plants. Price paid shall include coordination with the Watershed Council on delivery time for volunteer installation. Price paid shall also include

- a two-year warranty for plant survivability; and,
- all other items necessary to complete the work.

ITEM NO. 32 – Interpretive Sign

The interpretive sign will be paid for on a lump sum basis for the price for all labor, material and equipment to perform the installation of the interpretive sign as supplied by the owner.

ITEM NO. 33 - Unforeseen

Unforeseen site conditions will be paid for at the negotiated price after the Work has been authorized by the ENGINEER. Price paid shall be payment in full for all labor, material, and equipment required for remedying unforeseen physical conditions and shall be based upon an agreement negotiated and approved prior to beginning this Work.

ALTERNATES

ITEM NO. 19 – Pervious Pavement- Pavers- Herringbone

Pervious Pavement- Pavers Herringbone shall be paid for on a Contract Unit Price per Square Foot (S.F.). Price paid shall be payment in full for all labor, material and equipment required to perform installation, to the extent shown on the Drawings or as directed by the ENGINEER and shall include, but is not limited to:

- soil erosion and sedimentation controls;
- all excavation, rough and final grading, including 'stepped' cross-section for drainage;
- furnish and install geotextile;
- furnish and install bedding sand;
- furnish and install pavers in Herringbone pattern;
- furnish and install joint sand;
- furnish and install curb, gutter, and header curb;
- provide certification and testing services as required
- provide 2-year warranty on product and installation; and
- all other items necessary to complete the work.

PART 2 PRODUCTS (NOT USED)
PART 3 EXECUTION (NOT USED)

END OF SECTION