

CITY OF NORTH MIAMI
CONSTRUCTION SERVICES AGREEMENT
(Traffic Calming Device)

THIS CONSTRUCTION SERVICES AGREEMENT ("Agreement") is made and entered into this 12 day of February, 2014 by and between the **City of North Miami**, a Florida municipal corporation, located at 776 NE 125th Street, North Miami, FL ("City") and **Solutions Capital Group, Inc.**, a for-profit corporation organized and existing under the laws of the State of Florida, having its principal office at 666 NE 125th Street, #243, North Miami, FL 33161 ("Contractor"). The City and Contractor shall collectively be referred to as the "Parties", and each may individually be referred to as a "Party".

RECITALS

WHEREAS, the City is desirous of obtaining the labor, supervision, materials, equipment, tools, services and expertise necessary for the professional construction of one (1) traffic calming device (a.k.a., traffic circle) at the intersection of Northeast 8th Avenue and 123rd Street ("Work Site"), in accordance with the conditions, terms and specifications contained in the Contract Documents ("Construction"); and

WHEREAS, in response to the City's request, Contractor submitted a Proposal that was evaluated as the lowest and most responsive; and whose price, qualifications and references were the most advantageous to the City; and

WHEREAS, the Contractor has expressed the capability, willingness and expertise to perform the Construction pursuant to the Contract Documents; and

WHEREAS, the City Manager has determined that entering into this Agreement with Contractor is in the City's best interest.

NOW THEREFORE, in consideration of the mutual terms and conditions set forth herein and other good and valuable consideration, the Parties hereto agree as follows:

ARTICLE 1 - RECITALS

1.1 The recitals are true and correct and are hereby incorporated into and made a part of this Agreement.

ARTICLE 2 - CONTRACT DOCUMENTS

2.1 The following documents are incorporated into and made part of this Agreement (collectively referred to as the "Contract Documents"):

2.1.1 City's Scope of Work for Construction to be performed by Contractor, attached hereto as "Exhibit A";

2.1.2 Miami-Dade County Specifications for Traffic Calming Devices, attached hereto as "Exhibit B";

2.1.3 Contractor's Bid Proposal dated January 22, 2014 ("Proposal"), attached hereto as 'Exhibit C';

2.1.4 City's Quote Tabulation Sheet, attached hereto as "Exhibit D"; and

2.1.5 Any additional documents which are required to be submitted by Contractor pursuant to this Agreement and Contract Documents.

2.2 In the event of any conflict between the Contract Documents or any ambiguity or missing specification or instruction, the following priority is hereby established:

2.2.1 Specific written direction from the City Manager or City Manager's designee.

2.2.2 This Agreement.

2.3 The Parties agree that Contractor is responsible for clarifying any ambiguity, conflict, discrepancy, omission, or other error prior to Contractor submitting its Proposal or the right to clarify same shall be waived.

ARTICLE 3 - TIME FOR PERFORMANCE

3.1 The Time for Performance shall not exceed Ninety (90) days from the City's issuance of the Notice to Proceed excluding City observed holidays and weekends. The Contractor agrees that the performance of Construction shall be pursued on schedule, diligently and uninterrupted at a rate of progress which will ensure full completion within the agreed Time for Performance. Failure to achieve timely final completion within the time provided shall be regarded as a material breach of this Agreement and subject to the appropriate remedies available at law.

3.2 When, in the opinion of the City, reasonable grounds for uncertainty exist with respect to the Contractor's ability to perform Construction or any portion thereof, the City may request that the Contractor, within a reasonable time frame set forth in the City's request, provide adequate assurances to the City in writing, of Contractor's ability to perform in accordance with terms of this Agreement. In the event that the Contractor fails to provide the City the requested assurances within the prescribed time frame, the City may treat such failure as a repudiation or breach of this Agreement, and resort to any remedy for breach provided for in this Agreement or at law.

ARTICLE 4 - COMPENSATION

4.1 The Contractor shall be paid an amount not to exceed Eighty Thousand Nine Hundred Dollars (\$80,900.00) as full compensation for the completion of Construction. Funding for this Agreement is contingent on the availability of funds and the Agreement is subject to amendment or termination due to lack of funds or a reduction of funds, upon ten (10) days written notice to Contractor.

4.2 The City shall pay Contractor within forty-five (45) days of receipt of invoice the total shown to be due on such invoice, provided the City has accepted the Construction.

ARTICLE 5 - CONTRACTOR'S RESPONSIBILITIES

5.1 As an inducement for the City to enter into this Agreement, Contractor has represented an expertise in the provision of Construction of similar public projects. In reliance upon those representations, the City has entered into this Agreement with Contractor for the provision of Construction.

5.2 Contractor shall supervise and direct the work competently and efficiently, devoting such attention and applying Contractor's best skill, attention and expertise. Contractor shall be solely responsible for and have control over the means, methods, techniques, sequences and procedures of the work and shall ensure that the finished Construction accurately complies with the Contract Documents.

5.3 When necessary, Contractor shall provide and pay for competent, suitably qualified personnel to perform portions of the Construction as required by the Contract Documents. Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them. Contractor shall at all times maintain good discipline and order at the Work Site.

5.4 Contractor shall furnish, pay for and assume full responsibility for all materials, equipment, transportation, machinery, tools, appliances, water, heat, utilities and all other facilities and services necessary for the furnishing, performance and proper completion of Construction.

5.5 Prior to the execution of this Agreement and in any event, prior to the commencement of any work, Contractor shall furnish in writing to the City, the names of persons or entities proposed for any portion of the Construction ("Subcontractor"). The City shall advise Contractor, in writing, of any proposed Subcontractor to which the City has an objection. Contractor shall not contract with a proposed Subcontractor with whom the City has made an objection. If the City objects to a Subcontractor proposed by Contractor, Contractor shall propose another with whom the City has no objection.

5.6 Contractor shall confine equipment, the storage of materials and the operations of workers to the worksite and areas identified in and permitted by the Contract Documents and shall not unreasonably encumber the premises with equipment or other materials.

5.7 Contractor warrants that any and all work, materials, services or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result, will be supplied by the Contractor at its own cost, whether or not specifically called for.

5.8 Contractor warrants and accepts that any and all work, materials, services or equipment necessitated by the inspections of City, County or state agencies, or other regulatory agencies as are applicable, to bring the project into conformity with the Contract Documents and all applicable laws, codes, regulations, procedures, or considered inside the contemplation of the Contract Documents, shall be deemed the responsibility of the Contractor at no additional cost to the City.

ARTICLE 6 - SCOPE OF CONSTRUCTION

6.1 The general sequence of the work shall be submitted by the Contractor and approved by the City before any work commences. The City reserves the right to issue directives as necessary to facilitate the flow of work or to minimize any conflict with public operations.

6.2 The Contractor shall provide all required labor, supervision, materials, equipment, tools, services and expertise necessary for the completion of Construction, under the terms, conditions and specifications contained in the Contract Documents. Contractor shall perform the Construction in accordance with that degree of care and skill ordinarily exercised by reputable members of its profession.

6.3 Contractor represents and warrants to the City that: (i) Contractor possesses all qualifications, licenses and expertise required for the provision of Construction, with personnel fully licensed by the State of Florida; (ii) Contractor is not delinquent in the payment of any sums due the City, including payment of permit fees, local business taxes, or in the performance of any obligations to the City; (iii) all personnel assigned to perform work shall be, at all times during the term hereof, fully qualified and trained to perform the tasks assigned to each; (iv) the Construction will be performed in the manner and at such times and locations as described by the City for the budgeted amount; and (v) the person executing this Agreement on behalf of Contractor is duly authorized to execute same and fully bind Contractor as a party to this Agreement.

6.4 Contractor agrees and understands that: (i) any and all Subcontractors used by Contractor shall be paid by Contractor and not paid directly by the City; and (ii) any and all liabilities regarding payment to or use of Subcontractors for any of the work related to this Agreement shall be borne solely by Contractor.

6.5 During performance of the Construction, Contractor shall cause a minimum of inconvenience to the public and to local business activities and shall ensure that the public roadways and any improvements or appurtenants in the vicinity of the Work Site, remain open to the public whenever and wherever possible.

6.6 Contractor shall at all times, during the performance of Construction, keep the Work Site free and clear of all rubbish and debris. Any material or waste generated by Contractor or its employees, agents and Subcontractors shall be removed and disposed of by the Contractor at its expense, to the satisfaction of the City.

6.7 In the event Contractor fails to remove all rubbish, debris, materials and waste from the Work Site, the City may employ labor and equipment necessary to clear the site and charge Contractor for the City's cost incurred cleaning the Work Site.

6.8 Contractor shall notify the City in writing, of any pre-existing damage to surrounding roadways, swales and improvements prior to commencing any work. Failure to notify the City of any damage shall result in the Contractor's duty to repair the damage at no additional expense to the City.

6.9 Contractor shall restore in an acceptable manner or replace all property, both public and private, which has been displaced or damaged by the Contractor during the performance of Construction. Contractor shall leave the Work Site unobstructed and in a neat and presentable condition. The term "property" shall include, but is not limited to, roads, sidewalks, curbs, driveways, walls, fences, landscaping, awnings, utilities, footings and drainage structures.

6.10 Contractor shall exercise due caution in the performance of this Agreement to minimize the possibility of damage to utilities resulting from its activities. Contractor shall verify the location of all overhead and underground utilities prior to any excavation, including notifying the Underground Notification Center (1-800-432-4770) and the City's Public Works Department of any proposed excavation locations.

6.11 Construction shall be completed by the Contractor to the satisfaction of the City. The City shall make decisions on all claims regarding interpretation of the Agreement and on all other matters relating to the execution, progress and quality of the Construction.

6.12 Contractor warrants and accepts that any and all repair work required during the construction phase, irrespective of the cause, shall be deemed the responsibility of the Contractor at no additional cost to the City.

6.13 Contractor accepts, understands and agrees that these provisions of the Agreement constitute a material inducement for the City to enter into this Agreement and that the City has indeed relied on these particular provisions in making its decision to enter into this Agreement with Contractor.

ARTICLE 7 - CHANGES IN CONSTRUCTION

7.1 One or more changes to the work within the general scope of this Agreement may be ordered by Change Order. The Contractor shall proceed with any such changes, and they shall be accomplished in strict accordance with the Contract Documents and with the terms and conditions described in this Article.

7.2 A Change Order shall mean a written order to the Contractor executed by the Parties following execution of this Agreement, directing a change in Construction and may include a change in the agreed compensation and/or the time for Contractor's performance.

7.3 The execution of a Change Order by the Contractor shall constitute conclusive evidence of the Contractor's agreement with the ordered changes in Construction and the Contractor, by executing the Change Order, waives and forever releases any claims against the City for additional time or compensation for matters relating to or arising out of or resulting from, the work included within or affected by the executed Change Order.

ARTICLE 8 - ENVIRONMENTAL AND SAFETY REQUIREMENTS

8.1 Contractor shall comply and shall secure compliance by its employees, agents, and Subcontractors, with all applicable environmental, health, safety and security laws and regulations pertaining to the Construction provided under this Agreement. Contractor agrees to utilize protective devices as required by applicable laws, regulations, and any industry standards,

and to ensure that such protective devices are properly used by its employees, agents and Subcontractors in the provision of Construction.

8.2 Contractor shall comply with all applicable minimum safety standards required by local, county, state and federal regulations to prevent any damage, loss or injury to persons or property.

8.3 The Contractor shall be solely responsible for pedestrian and vehicular control and safety within the worksite area and shall provide the necessary warning devices, cones, markers, flags, barricades and other control devices, in addition to ground personnel needed for directing traffic and maintaining safety, protection and warning to all persons and vehicular traffic within the worksite area.

8.4 The Contractor represents, with full knowledge that the City is relying upon these representations when entering into this Agreement with the Contractor, that the Contractor has the professional expertise, ability, capacity, skill, licenses, financial resources, and experience to perform the Construction under the requirements of this Article.

ARTICLE 9 - INDEPENDENT CONTRACTOR

9.1 Contractor has been procured and is being engaged by the City as an independent contractor, and not as an agent or employee of the City. Accordingly, Contractor shall not attain, nor be entitled to, any rights or benefits under the Civil Service or Pension Ordinances of the City, nor any rights generally afforded classified or unclassified employees of the City. Contractor further understands that Florida workers' compensation benefits available to employees of the City, are not available to Contractor. Therefore, Contractor agrees to provide workers' compensation insurance for any employee or agent of Contractor rendering services to the City under this Agreement.

ARTICLE 10 - CONFLICTS OF INTEREST

10.1 Contractor represents and warrants to the City that it has not employed or retained any person or company employed by the City to solicit or secure this Agreement and that it has not offered to pay, paid, or agreed to pay any person any fee, commission, percentage, brokerage fee, or gift of any kind contingent upon or in connection with, the award of this Agreement.

10.2 Contractor covenants that no person under its employ who presently exercises any functions or responsibilities on behalf of the City in connection with this Agreement has any personal financial interest, directly or indirectly, with the Contractor or Subcontractors, except as fully disclosed and approved by the City. Contractor further covenants that, in the performance of this Agreement, no person having such conflicting interest shall be employed.

ARTICLE 11 - DEFAULT

11.1 If Contractor fails to comply with any term or condition of this Agreement, or fails to perform any of its obligations hereunder, then Contractor shall be in default. The City shall have the right to terminate this Agreement, in the event Contractor fails to cure a default within five (5) business days after receiving Notice of Default. Contractor understands and agrees that termination of this Agreement under this section shall not release Contractor from any obligations accruing prior to the effective date of termination.

ARTICLE 12 - CITY'S TERMINATION RIGHTS

12.1 The City shall have the right to terminate this Agreement, in its sole discretion at any time, with or without cause, upon ten (10) days written notice to Contractor. In such event, the City shall pay Contractor compensation for Construction rendered prior to the effective date of termination. The City shall not be liable to Contractor for any additional compensation, or for any consequential or incidental damages.

ARTICLE 13 - NOTICES

13.1 All notices, demands, correspondence and communications between the City and Contractor shall be deemed sufficiently given under the terms of this Agreement when dispatched by registered or certified mail, postage prepaid, return receipt requested, addressed as follows:

To Contractor: Solutions Capital Group, Inc.
 Attn: Antony Joanem
 666 NE 125th Street, #243
 North Miami, FL 33161
 Phone: (786) 449-9005
 Fax: () -
 vcherisol@allflaconstruction.com

To City: City of North Miami
 Attn: City Manager
 776 N.E. 125th Street
 North Miami, Florida 33161

With a copy to: City Attorney
 City of North Miami
 776 N.E. 125th Street
 North Miami, Florida 33161

13.2 Either Party may at any time designate a different address and/or contact person by giving notice as provided above to the other Party. Such notices shall be deemed given upon receipt by the addressee.

13.3 In the event there is a change of address and the moving Party fails to provide notice to the other Party, then notice sent as provided in this Article shall constitute adequate notice.

ARTICLE 14 - INDEMNIFICATION

14.1 Execution of this Agreement by Contractor is a representation that Contractor has visited the Work Site and is familiar with the local conditions under which the Construction is to be performed, and relieves the City from any liability in regard to any matter not immediately brought to the attention of the City.

14.2 The Contractor shall defend, indemnify and hold harmless the City, its officers and employees from and against any and all claims, costs, losses and damages including, but not

limited to reasonable attorney's fees, caused by the negligent acts or omissions of the Contractor, its officers, directors, agents, partners, Subcontractors, employees and managers in the performance of the Construction under this Agreement.

14.3 The Contractor shall be fully responsible to City for all acts and omissions of the Contractor, its employees, Subcontractors, suppliers, or other persons directly or indirectly employed by its Subcontractors or suppliers, and any other persons or organizations performing or furnishing supplies under a direct or indirect agreement with Contractor. Nothing in the Contract Documents shall create any contractual relationship between City and any such Subcontractor, supplier or other person or organization, nor shall it create any obligation on the part of City to pay or to cause the payment of any money due any Subcontractor, supplier, employee or agent except as may otherwise be required by law.

14.4 The Contractor shall assume full responsibility for any damage to any mangroves, preserves, private or public land or areas, resulting from the performance of this Agreement.

14.5 If any Subcontractor, supplier, laborer, or materialmen of Contractor or any other person directly or indirectly acting for or through Contractor files or attempts to file a mechanic's or construction lien against the real property on which the work is performed or any part or against any personal property or improvements or make a claim against any monies due or to become due from the City to Contractor or from Contractor to a Subcontractor, for or on account of any work, labor, construction services, material, equipment, or other items furnished in connection with the Construction, Contractor agrees to satisfy, remove, or discharge such lien or claim at its own expense by bond, payment, or otherwise within ten (10) days of the filing or from receipt of written notice from the City.

14.6 Nothing contained in this Agreement is any way intended to be a waiver of the limitation placed upon the City's liability as set forth in Chapter 768, Florida Statutes. Additionally, the City does not waive sovereign immunity, and no claim or award against the City shall include attorney's fees, investigative costs or pre-judgment interest.

ARTICLE 15 - WARRANTY

15.1 The Contractor warrants that all materials and workmanship, whether furnished by the Contractor, its Subcontractors or suppliers will comply with the Contract Documents.

15.2 Contractor warrants that all materials and workmanship furnished, whether furnished by the Contractor, its Subcontractors or suppliers shall be of good quality will be free from defects whether patent or latent in nature. If, within one (1) year after the date of final completion or such longer period of time as may be prescribed by laws or regulations, or by the terms of any applicable special guarantee required by the Contract Documents, any work is found to be defective, whether observed before or after acceptance by City, Contractor shall promptly, without cost to City, either correct such defective work, or, if it has been rejected by City, remove it from the site and replace it with non-defective work that is satisfactorily correct to the City. If Contractor does not promptly comply with the terms of such instructions, the City may have the defective work corrected and all direct, indirect and consequential costs of such removal and replacement, including but not limited to fees and charges of engineers, attorneys and other professionals, shall be paid by Contractor.

15.3 It is understood and agreed by the Contractor that the North Miami Building Department and its inspectors are professionals who are dedicated to providing efficient and courteous service to all residents, professionals, contractors and the public at large through plans processing, inspections and building maintenance, which ensures the protection of the citizens and enhances the quality of life within the City. For the purposes of this project, the Building Department is not a surrogate of the City. All decisions by the Building Department as to whether some aspect of the Project is or is not in compliance with the Florida Building Code, Florida Fire Prevention Code and/or any other applicable codes, regulations, laws and ordinances are independent of and not deemed to be an act or a decision by the City. The Contractor agrees that it shall be the responsibility of the Contractor to ensure compliance with all applicable codes, regulations, law and ordinances. The Contractor warrants and accepts that any and all work necessitated by inspections which is not prescribed in the plans or specifications, but necessitated to bring the project into conformity with the Contract Documents and all applicable laws, codes, regulations, procedures and/or considered inside the contemplation of the Contract Documents shall be deemed the responsibility of the Contractor at no additional cost to the City.

ARTICLE 16 – INSURANCE & BONDS

16.1 Prior to the execution of this Agreement, the Contractor shall submit certificate(s) of insurance evidencing the required coverage and specifically providing that the City is an additional named insured. Contractor shall not commence work under this Agreement until after Contractor has obtained all of the minimum insurance described in the Contract Documents and the policies of such insurance detailing the provisions of coverage have been received and approved by the City. Contractor shall not permit any Subcontractor to begin work until after similar minimum insurance to cover Subcontractor has been obtained and approved. In the event the insurance certificate provided indicates that the insurance shall terminate and lapse during the term of this Agreement, Contractor shall furnish, at least thirty (30) calendar days prior to expiration of the date of the insurance, a renewed certificate of insurance as proof that equal and like coverage and extension is in effect. Contractor shall not continue to perform the Construction required by this Agreement unless all required insurance remains in full force and effect.

16.2 All insurance policies required of the Contractor shall be written by a company with a Best's rating of B+ or better and duly authorized and licensed to do business in the State of Florida and be executed by duly licensed managers upon whom service of process may be made in Miami-Dade County, Florida.

16.3 ~~A payment and performance bond in the amount of 100% of the compensation amount of this Agreement shall be required by the Contractor prior to the commencement of Construction. The payment bond shall secure and guarantee payment of all persons performing labor or providing materials for the Construction rendered under this Agreement. The performance bond shall secure and guarantee Contractor's faithful performance of this Agreement, including but not limited to Contractor's obligation to correct defects after final payment has been made as required by the Contract Documents.~~

ARTICLE 17 - FORCE MAJEURE

17.1 A "Force Majeure Event" shall mean an act of God, act of governmental body or military authority, fire, explosion, power failure, flood, storm, hurricane, sink hole, other natural disasters,

epidemic, riot or civil disturbance, war or terrorism, sabotage, insurrection, blockade, or embargo. In the event that either Party is delayed in the performance of any act or obligation pursuant to or required by the Agreement by reason of a Force Majeure Event, the time for required completion of such act or obligation shall be extended by the number of days equal to the total number of days, if any, that such Party is actually delayed by such Force Majeure Event. The Party seeking delay in performance shall give notice to the other Party specifying the anticipated duration of the delay, and if such delay shall extend beyond the duration specified in such notice, additional notice shall be repeated no less than monthly so long as such delay due to a Force Majeure Event continues. Any Party seeking delay in performance due to a Force Majeure Event shall use its best efforts to rectify any condition causing such delay and shall cooperate with the other Party to overcome any delay that has resulted.

ARTICLE 18 – LIQUIDATED DAMAGES

18.1 It is mutually agreed that time shall be an essential part of this Agreement, and that in case of the failure on the part of the Contractor to achieve completion of Construction within the time specified and agreed upon under Article 3 of this Agreement, the City will be damaged thereby. Therefore, it is understood that Three Hundred Fifty Dollars (\$350.00) per consecutive calendar day will be deducted, as liquidated damages, for each day beyond the specified completion time. Contractor agrees that said sum shall be deducted from monies due to Contractor under this Agreement, or if no money is due, the Contractor agrees to pay to the City as liquidated damages, and not by way of penalty, the amount of Three Hundred Fifty Dollars (\$350.00) per consecutive calendar day delayed in finishing the Construction, in excess of the number of calendar days prescribed in this Agreement.

18.2 The City may, in lieu of the above, notify the Contractor to cease work and the City will complete the work. The cost of completion thereof to the City including all materials, rent, labor, equipment and necessary supervision plus fifteen percent (15%) for overhead, shall be deducted from Contractor's compensation.

ARTICLE 19 - PUBLIC RECORDS

19.1 Contractor understands that the public shall have access, at all reasonable times, to all documents and information pertaining to City contracts, subject to the provisions of Chapter 119, Florida Statutes, and agrees to allow access by the City and the public to all documents subject to disclosure under applicable law.

19.2 Contractor shall additionally comply with Section 119.0701, Florida Statutes, including without limitation, the following conditions: (1) keep and maintain public records that ordinarily and necessarily would be required by the City to perform this service; (2) provide the public with access to public records on the same terms and conditions as the City would at the cost provided by Chapter 119, Florida Statutes, or as otherwise provided by law; (3) ensure that public records that are exempt or confidential and exempt from disclosure are not disclosed, except as authorized by law; (4) meet all requirements for retaining public records and transfer, at no cost to the City, all public records in its possession upon termination of this Agreement and destroy any duplicate public records that are exempt or confidential and exempt from disclosure requirements; and (5) all electronically stored public records must be provided to the City in a format compatible with the City's information technology systems.

ARTICLE 20 - MISCELLANEOUS PROVISIONS

- 20.1 No waiver or breach of any provision of this Agreement shall constitute a waiver of any subsequent breach of the same or any other provision hereof, and no waiver shall be effective unless made in writing.
- 20.2 All representations, indemnifications, warranties and guarantees made in, required by, or given in accordance with this Agreement, as well as all continuing obligations indicated in the Contract Documents, shall survive final payment, completion and acceptance of the Services and termination or completion of the Agreement.
- 20.3 Should any provision, paragraph, sentence, word or phrase contained in this Agreement be determined by a court of competent jurisdiction to be invalid, illegal or otherwise unenforceable under the laws of the State of Florida, such provision, paragraph, sentence, word or phrase shall be deemed modified to the extent necessary in order to conform with such laws, or if not modifiable, then same shall be deemed severable, and in either event, the remaining terms and provisions of this Agreement shall remain unmodified and in full force and effect or limitation of its use.
- 20.4 This Agreement constitutes the sole and entire agreement between the Parties. No modification or amendments to this Agreement shall be binding on either Party unless in writing and signed by both Parties.
- 20.5 This Agreement shall be construed and enforced according to the laws of the State of Florida. Venue in any proceedings between the Parties shall be in Miami-Dade County, Florida.
- 20.6 The City reserves the right to audit the records of the Contractor covered by this Agreement at any time during the provision of Services and for a period of three years after final payment is made under this Agreement.
- 20.7 The Contractor agrees to comply with and observe all applicable federal, state, and local laws, rules, regulations, codes and ordinances, as they may be amended from time to time.
- 20.8 Services shall not be subcontracted, transferred, conveyed, or assigned under this Agreement in whole or in part to any other person, firm or corporation without the prior written consent of the City.
- 20.9 The City of North Miami is exempt from Federal Excise and State taxes. The applicable tax exemption number or certificate shall be made available upon request.
- 20.10 The professional Services to be provided by Contractor pursuant to this Agreement shall be non-exclusive, and nothing herein shall preclude the City from engaging other firms to perform Services.
- 20.11 This Agreement shall be binding upon the Parties herein, their heirs, executors, legal representatives, successors and assigns.

20.12 The Contractor agrees that it shall not discriminate as to race, sex, color, creed, national origin, or disability, in connection with its performance under this Agreement.

20.13 In the event of any dispute arising under or related to this Agreement, the prevailing party shall be entitled to recover all actual attorney fees, costs and expenses incurred by it in connection with that dispute and/or the enforcement of this Agreement, including all such actual attorney fees, costs and expenses at all judicial levels, including appeal, until such dispute is resolved with finality.

20.14 All other terms, conditions and requirements contained in the Contract Documents, which have not been modified by this Agreement, shall remain in full force and effect.

20.15 This Agreement may be executed in two or more counterparts, each of which shall constitute an original but all of which, when taken together, shall constitute one and the same Agreement.

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IN WITNESS WHEREOF, the Parties have executed this Agreement by their respective proper officers duly authorized the day and year first written above.

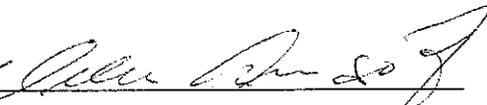
ATTEST:

Solutions Capital Group, Inc., a Florida for-profit corporation:

Corporate Secretary or Witness:

"Contractor"

By: _____

By: 

Print Name: _____

Print Name: VIERA CHERISO C

Title: _____

Title: PRESIDENT

Date: _____

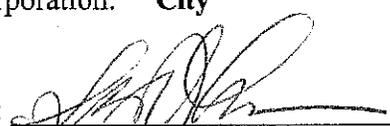
Date: 2/10/14

ATTEST:

City of North Miami, a Florida municipal Corporation: "City"

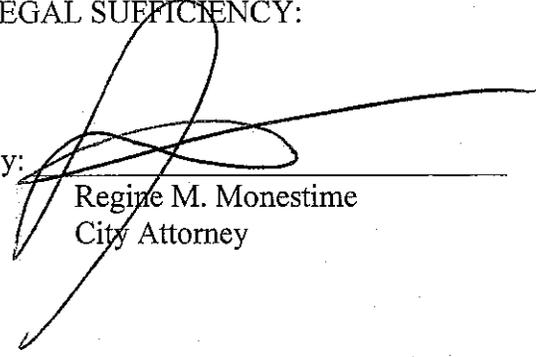
By: 

Michael A. Etienne
City Clerk

By: 

Stephen E. Johnson
City Manager

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

By: 

Regine M. Monestime
City Attorney



Florida Licensed
CGC 1509951-CCC 1327330

SOLUTIONS CAPITAL GROUP, INC
All Florida Constructions & Roofing CO, dba

666 NE 125th Street Suite 243
North Miami, Florida 33161
Phone: 786-449-9005, 305-300-4026; 954-673-0949
EMAIL: info@allfaconstruction.com:

Customer/Owner Name and Address: CITY OF NORTH MIAMI 776 NE 125 STREET		Region:	Date Prepared: January 22, 2014
Telephone No.:		Project Description: (Project Title, Facility Name and Location)	
Email address:		TRAFFIC CIRCLE AT NE 8th AVE AND 123 STREET INTERSECTIO	
County:			
MIAMI-DADE			

BID PROPOSAL

Section Number	Section Title/ Item Description	Estimated Quantity	Unit	Unit Cost	Sub-total	TOTAL
001	GENERAL CONDITIONS AND ADMINISTRATION					
	INSPECTION AND ARCHITECTURAL DRAWING					\$3,500.00
	PERMIT FEE (waived per city requirement)					
	MOT, EQUIPMENT AND TOOLS RENTAL					\$6,500.00
	MOBILIZATION					\$3,000.00
002	GENERAL CONSTRUCTION					
	SITE WORK /CLEARING AND GRUBBING					\$7,800.00
	FORMING AND CONCRETE WORK	500	SF			\$9,500.00
	STREET PAVING AND MARKING	6000	SF			\$32,900.00
	BRICK PAVERS	400	SF			\$4,500.00
	STREET SIGNAGE					\$2,500.00
003	ELECTRICAL					
	FLOOD LIGHTING					\$3,200.00
004	PLUMBING					



Exhibit A

SCOPE OF WORK

1. GENERAL

- a) The BUILDING CODE as set forth in Chapter 8 of the Code of Miami-Dade County, the PUBLIC WORKS MANUAL OF METROPOLITAN DADE CITY, and the 2006 EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION'S DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND A OPERATIONS ON THE STATE HIGHWAY SYSTEM, as amended by the Contract Documents; all are hereby incorporated by reference.
- b) Unless otherwise specifically noted, the 2007 FLORIDA DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD -AND BRIDGE CONSTRUCTION is hereby incorporated by reference and page numbers refer to that edition. Where the FDOT Standard Specifications appear to conflict with other topics specifically covered by these Contract documents, the FDOT standards shall not apply.
- c) Miami-Dade County's TRAFFIC CONTROL EQUIPMENT SPECIFICATIONS AND STANDARDS (TCESS) FOR THE METRO TRAFFIC CONTROL SYSTEM with its supplements or addenda is incorporated herein by reference and shall be considered a part of these Special Provisions. The above document, as modified herein, shall govern the installation or construction of all traffic signalization, signing and pavement marking on this project.
- d) The FLORIDA TRENCH SAFETY ACT (Sections 553.60-553.64, Florida Statutes) is hereby incorporated by reference and made a part of these Special Provisions. The purpose and intention of the State of Florida "Trench Safety Act" is to provide for increased worker safety by requiring compliance with sufficient standards for trench safety and providing additional specific requirements when the excavation is in excess of five (5) feet deep. By executing the Contract, the Contractor certifies that he is fully aware of the Trench Safety Act, and will comply with applicable trench safety standards.
- e) In accordance with Sections 553.60-553.64 of the Florida Statutes, the bidder acknowledges those included in the various items of the proposal and in the total bid price are costs for complying with the Florida Trench Safety Act, laws of Florida effective October 1, 1990.
- f) The above referenced Standards are intended to supplement, not supersede the requirements set forth herein and, unless otherwise noted, the latest revision shall apply. Where differences occur between referenced Standards and the Contract Documents, the more stringent shall apply unless otherwise directed by the Engineer in writing.

2. LOCATION OF WORK

The location of work to be performed under the terms of this Agreement shall be as follows:

1. NE 8th Avenue and 123rd Street.

3. PLANS AND WORKING DRAWINGS



a) Plans:

There are no Engineering plans accompanying these Contract Documents. However, typical details and/or sketches regarding the proposed work along with surveys of the intersections have been provided. Additional standard details are available in the Miami-Dade County Public Works Manual and the Florida Department of Transportation's Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System. The City through its Engineer shall have the right to modify the details and/or sketches, to supplement the sketches with additional plans and/or with additional information as the work proceeds; all of which shall be considered as plans accompanying these Specifications herein generally referred to as the "Plans and specifications." In case of disagreement between the Plans and Specifications, the Engineer shall make a final determination as to which shall govern.

b) Working Drawings:

The Contractor shall prepare whatever detailed working drawings are necessary to enable him to fabricate, erect, and construct all parts of the work in conformity with the Plans and Specifications. Working drawings shall include shop drawings and erection diagrams for structural steel where required. Working drawings shall be submitted to the Engineer in triplicate; one set will be returned to the Contractor approved or showing the changes or corrections required; if changes or corrections are required, five copies shall be resubmitted until they are approved. Payment for working drawings, revisions thereof, and for copies furnished, shall be included in the amounts bid for materials or work. The Contractor shall furnish as many sets of paper blueprint copies for working drawings as the City and the Engineer may need for the work. The Contractor should allow a minimum of fourteen (14) calendar days for the City's approval of drawings.

The City shall not be responsible for errors or minor discrepancies of the Contractor's drawings, even though approved.

4. PERMITS AND LICENSES

a) Permits:

It shall be the contractor's responsibility to obtain all permits required for the job prior to commencement of work. Permits to perform work within the City's Right-of-way are issued by the City of North Miami Building and Zoning Department located at 12400 NE 8th Avenue, North Miami, Florida 33161.

Additional permits, which may be required by other agencies, including those required for tree removal and/or relocation will be the responsibility of the contractor.

The actual cost for City issued permits only, **excluding** the Miami-Dade County surcharge applied to every permit within the City, will be waived.

b) Licenses

At the time of Bid the Bidder must hold a valid, current, and active license as a **FLORIDA**



Certified General Contractor in good standing.

5. **SITE INVESTIGATION**

The Contractor, by virtue of submitting their bid, acknowledges that he and all his subcontractors have satisfied themselves as to the nature and location of the work. The general and local conditions include, but are not restricted to those bearing upon transportation and traffic maintenance, the disposal, handling and storage of materials, access roads to the site, the conformation and conditions of the work area, and the character of the overall area where work is proposed.

NOTE:

The contractor and all sub-contractors, under this Contract, shall be prohibited from performing any work, other than specified in the contract and/or directed by the Engineer, within the limits of the project site, without prior written notification to the Engineer.

6. **PRE-CONSTRUCTION CONFERENCE**

After Award of Contract and prior to issuance of "Notice to Proceed," a Preconstruction Conference will be held with the Contractor and members of the City's Public Works Department. Public Works Department will set the time and place of this conference.

At the Pre-work Conference, the Contractor must provide two copies of a detailed construction-scheduling program showing the proposed starting and completion dates for each work classification. The work classification should be subdivided to the extent necessary to provide adequate detail and shall also include such items as mobilization, shop-drawing review, delivery of signal and lighting equipment if applicable, etc.

The Contractors shall submit the following items in the meeting:

1. Work Schedule (proposed).
2. Contractor's Chain of Authority.
3. Contractor's Emergency Telephone Numbers, during work hours, after hours, and on weekend, of Prime and MOT Contractor's Representatives.
4. Letter naming the Contractor's Superintendent and his qualifications.
5. Letter naming the Contractor's Work Site Traffic Supervisor and a copy of their respective Certification(s).
6. Letter naming the Contractor's MOT Flagmen and a copy of their training Certification(s).
7. Maintenance of Traffic Plan: Letter outlining the Specific Maintenance of Traffic Plan or Plans that will be used during construction. If the MOT plan is noted in the Construction Plans, the same shall be followed; contractor is to affirm in writing.
8. Shop drawing submittal schedule.
9. List of potential subcontractors and rental agreements.
10. Letter listing the material providers for this project, with the respective name and address; and letter certifying the compliance of the material with the project requirements.
11. List of equipments to be utilized for construction; including make, model, year, name



and description of equipments.

Upon receipt of the Notice to Proceed and/or Work Order, the Contractor shall commence work within five (5) calendar days and continue such work in an expeditious manner to a conclusion acceptable Engineer.

7. **FIELD OFFICE**

A local field office is not required.

8. **UTILITIES**

The Contractor shall make all necessary arrangements with the utility companies concerned for maintenance of their lines during the construction period. In the event that a complete relocation of utilities is required, but has not been accomplished prior to the effective, date of the "Notice to Proceed," the Contractor, nevertheless shall commence work under this Contract, and shall schedule his work to avoid interference with the utility relocation work.

Contractor will be required to pay and coordinate and file all necessary forms to ensure that water meters are provided as required for irrigation at the traffic circle. CONTACT Mr. Aleem Ghany, Director Public Works at 305-895-9838.

The City will not be liable for any delay or added expense the Contractor experiences due to the activities of utility companies, nor shall the City be held responsible for any damages to any utilities due to any actions by the Contractor.

NOTE: The Contractor shall contact the Sunshine State One Call of Florida at 1-800-432-4770 and other affected utility owners at least forty-eight (48) hours prior to commencing any trenching or excavation on this project.

The Contractor shall coordinate the raising and/or lowering or removal of utility systems with those utilities having jurisdiction.

9. **DAILY NOTIFICATION**

The Contractor shall notify the Engineer daily where each of his crews will be working and what work will be done. This notification shall be given each weekday between 3:00 p.m. and 4:00 p.m. on the prior day.

10. **LIMITATION OF OPERATIONS**

No work shall be done at all on Saturday or Sunday or any day between the hours 6:00 p.m. and 7:00 a.m., except such work as is necessary for the proper care and protection for the work already performed, or, except that permission to do such work may be secured from the Engineer.

The Contractor may request in writing to work weekends and/or nights should such work allows for the expeditious completion of the Work. The final approval shall be made by the Engineer. Weekend and/or night work shall not substitute for regular workweek hours.



11. PERFORMANCE OF WORK

The Contractor will furnish a qualified superintendent who will be present at all times during the course of the work, and shall be authorized to act for the Contractor. The Contractor shall keep on the job sufficient plant and equipment to meet the requirements of the work.

The plant shall be kept in a satisfactory operating condition and capable of safely and efficiently performing the work as set forth in the Plans and Specifications. The plant and all operations shall be subject to inspection by the Engineer at all times.

The Contractor shall submit for approval by the Engineer a description of the type of materials and equipment to be used; and the method of procedure to be used in the performance of the work.

Dust Control and Saw Cutting:

Dust control measures are required as necessary to prevent the surface and air transport of dust from any construction activity performed under this contract. This may include but is not limited to: Pre-watering deeply before excavation; scheduling thorough and consistent watering that does not run off the site; applying best management practices in the loading, offloading, and transport of soils and miscellaneous materials; covering or otherwise stabilize piles when necessary; and planning schedules so control measures are available throughout the project.

When required in performance of this Contract, material may be removed by either saw cutting the slab perpendicular to the long edge, or by any other means that will produce a clean neat cut and that is acceptable to the Engineer. All costs for saw cutting and/or any other necessary means for accomplishing the bid items listed in this Contract shall be included in the cost for said item.

When cutting thru concrete, care should be exercised to prevent dust from becoming air borne. The Contractor must use an engineering control such as the use a wet saw or dust collector. The Engineer shall have the final determination that in a particular circumstance this is not feasible, and the concrete must be cut dry.

No separate item for dust control measures is included for payment in this Contract. The Contractor shall consider the cost of any dust control measures that is necessary for the proper construction of the project as included in the Contract price for items of work for which dust control measures are required.

Open Excavations:

At the close of each workday, holidays and weekdays, the Contractor shall refill all open excavations, or cover open excavation with steel plates capable of supporting vehicular traffic. All costs for providing this shall be included in the Maintenance of Traffic item at no additional cost.

Protection of Existing Utility Poles:



The Contractor shall ensure that existing utility poles are properly protected during installation of pipes and structures and shall coordinate with the utility pole owner any safeguards necessary to protect the utility pole including bracing of the pole, if necessary. All costs for protection of utility poles and any costs for the temporary bracing by the utility pole owner shall be the responsibility of the Contractor and shall be considered incidental to and included in the terms of the "Bid Form". No additional compensation will be allowed.

12. PROJECT TIME SCHEDULE

After a "Notice to Proceed" and issuance of a Purchase Order(s), the Contractor shall commence the work within five (5) calendar days from the date of each Work Order and continue all work in an expeditious manner to a conclusion acceptable to the Engineer.

As time is an essential element of the contract, the Contractor is expected to supply sufficient work force material and equipment to perform the work listed under the "Scope of Work" in accordance with the schedule(s) approved by the Engineer and the requirements stipulated in the Contract Documents.

The lack of personnel, equipment or unsuitability of said equipment shall not be an acceptable reason for falling behind schedule.

All activities required to be performed to complete the Work, including site restoration and punch list items, shall be completed within the Contract time.

Progress of the work for each Work Order shall be judged based on a proportion of the amount of work completed and accepted, to the number of calendar days that remain on the Contract. Contract work completed shall not fall behind by more than ten (10) percentage points, according to the total number of days past since the issue date of the Work Order(s). The lack of equipment or unsuitability of said equipment shall not be an acceptable reason for falling behind schedule.

If the Contractor fails to complete all work under the contract within the time specified in the "Notice to Proceed" and/or Work Order(s), or fails to perform the work with sufficient personnel and equipment or with sufficient materials to assure the prompt completion of the work assigned, or discontinues the prosecution of the work, or fails to resume work which has been discontinued within a reasonable time after notice to do so, or becomes insolvent or is declared bankrupt, or files for reorganization under the bankruptcy or insolvency code, or for any other cause whatsoever, fails to carry on the work in an acceptable manner, or if the surety executing the bond, becomes unsatisfactory in the opinion of the City, the Engineer will give notice in writing to the Contractor and his surety of such delay, neglect, or default. Additionally, the City may opt to not issue further Work orders and/or to cancel the Contract in addition to assigning a non-responsive Contractor Evaluation rating.

13. RESTORATION OF PROPERTY

Property, public or private, if damaged during construction or removed for convenience of work, shall be repaired or replaced at Contractor's sole expense in a manner acceptable to the Engineer, prior to continuation of work.



Such facilities shall include, but are not limited to: Traffic signs and miscellaneous hardware removed from construction site, decorative signs, street lights, driveways, portions of yards, approaches, walkways, walls, fences, footings or underground utilities as well.

Notes:

1. Contractor will encounter some driveways within the work area. Such driveways shall be reconstructed as needed to meet with the final layout of the intersection improvements. Contractor shall obtain approval from the engineer to receive approval for any improvements that may impact adjacent property owners. Curb and Gutter shall be tapered and driveways (whether paved or not) shall be addressed on a case by case with **NO EXCEPTIONS**. This work shall be paid out of related items on the bid form. No additional payment will be made on this item by the City.
2. All street name signs shall remain in place during time of construction except those required to be relocated due to interference with actual construction. All signs relocated or damaged by the Contractor during the course of the work shall be re-installed or replaced at the proper location, as soon as possible at the Contractor's expense.

Prior to the removal of any traffic control signs that interfere with the construction, the Contractor shall provide temporary signing or other provisions to assure a continuous flow of traffic under at least the same conditions as previously existed.

3. **Final Clean-Up:** Upon completion of all work specified herein at each work site and before acceptance and payment is made, Contractor shall remove from each work-site all machinery, equipment, surplus and discarded materials, rubbish and temporary structures. Material cleared from site and deposited on adjacent property will not be considered as having been disposed of satisfactorily.

14. LEGAL RESTRICTIONS, PERMITS, AND TRAFFIC PROVISIONS

The Contractor shall procure, at his own expense, all necessary licenses and permits and shall give due and adequate notices to those in control of all properties that may be affected by Contractor's operations. The Contractor shall conform to all applicable laws, regulations, or ordinances with regard to labor employed, hours of work and his general operations.

The Contractor shall not close any thoroughfare nor interfere in any way with traffic on railway, highways, or on water, without the written consent of the proper authorities.

The Contractor shall be cognizant of and comply with the City Ordinance regulating the removal and/or relocation of all trees. Contractor shall restore the right-of-way as well as any affected adjacent private property.

15. COMPENSATION

All compensation for services called for in this Contract shall be made on the basis of the Contract Prices for quantities based upon the actual work performed, inspected and accepted by the Engineer. Such compensation shall be complete payment for all phases of the



operation and no additional payment shall be made for any reason whatsoever.

Each item listed on the bid form shall be fully provided inclusive of all equipment, labor, materials, and permits at the price indicated on the bid form for work installed and approved or percentage complete of lump sum. Price provided on the bid form shall be for 100% complete and approved work to cover those aspects of the job necessary to fulfill the intent of the project as per the City of North Miami. All measurements shall be field verified prior to payment processing. No price changes will be granted to the price because of the Contractor's failure to understand the intent of the project as presented in the mandatory pre-bid meeting, preconstruction meeting, or as part of the project specifications, conceptual drawings, ordinances, laws, regulations, or the agreement.

Payment shall be processed from the date the invoice is approved by the engineer and 45 days for check to be issued.

16. LIQUIDATED DAMAGES

The Contractor, or in case of his default the surety, shall pay to the City, not as a penalty but as liquidated damages, the amount stipulated below should the Contractor fail to complete all work specified within the time stipulated in the Contract including extra time granted in writing by the City.

The City does not waive its right to liquidated damages due under the Contract by allowing the Contractor to continue and to finish the work, or any part of it, after the expiration of the Contract Time including granted time extensions.

The requirements of this Section may not be waived, compromised or settled without the express written consent of the City.

17. USE OF PUBLIC STREETS

The use of public streets and alleys shall be such as to provide a minimum of inconvenience to the public and to other traffic. The Contractor shall immediately remove any earth or other excavated material spilled from trucks and clean the streets to the satisfaction of the governing authority.

The Public Works Department has not made any attempt to define the equipment to be used in transporting the excavated material since this may vary; however, the Contractor shall abide by the following general requirements:

Transport vehicles must be of the type(s) approved for this application by the political jurisdiction involved.

~~General requirements are that the vehicles have watertight bodies that they are properly equipped and fitted with seals and covers to prohibit material spillage or draining, and that they are cleaned as often as is necessary to prevent deposit of material on roadways.~~

Vehicles must be loaded within all legal weight limits and operated safely within all traffic and speed regulations. The Contractor must take special care to provide access to businesses,



schools and homes along the route of the work at all times. The City does not have areas designated as staging areas.

18. SCOPE OF WORK

Work under this Contract consists of furnishing all supervision, labor, materials, equipment, tools and performing all operations necessary for Roadway Improvements/Traffic Calming. This work includes proper coordination and placement of an MOT, installation of road base and asphaltic surfaces, pavement removal, pavement milling, pavement markings/stripping, installation of concrete pavers, signage, ensuring proper drainage, installation of sidewalks, ramps, detectable warnings, concrete curb and gutter, providing complete site restoration where required, installation of landscaping and irrigation, coordinating with FPL for electrical service, installation of "unistrut" systems for irrigation controls and meter can, and other elements of traffic calming device construction in a professional and timely manner.

The proposed circle will be constructed based on the conceptual drawings provided. The concept drawings include two separate designs which shall be applied to the location as noted on the location map provided.

Location of said circle will be at the discretion of the Engineer. Completion of said circle will serve as a "mock-up" to the rest of the Work and will be necessary prior to the authorization of the construction of any other portion of the Work under the Contract. In the event the mock-up is unacceptable to the City, no further authorizations under the contract will be made. Payment will be limited to those portions of the job that are accepted. No payment shall be made for portions that either have not been completed or are found unacceptable.

Incidental items required for areas such as street light, traffic signal installation, etc. may be added to this contract. However, incidental items may or may not be used for this contract.

The Contractor shall contact the Sunshine State One Call of Florida, Inc. at 1-800-432-4770 and other affected utility owners at least forty-eight (48) hours prior to commencing any trenching or excavation on this project.

19. MAINTENANCE OF TRAFFIC (FDOT SECTION 102)

It is essential that all detour signs, traffic controls and barricades be placed adequately and all controls inspected by the contractor at the close of every business day.

The applicable portions of the 2003 edition of the Manual of Uniform Traffic Control Devices (MUTCD), FDOT MOT Standard and Equipment (600 Series Indices in the Design Standards dated 2006) and Public Works Manual, Part 1, Standard Details, as pertain to the maintenance of traffic, shall be included as part of this contract documents. No work shall commence on this project or any portion thereof without implementation of this plan.

Excavated or other material stored adjacent to, or partially upon a roadway pavement, shall be adequately marked for traffic safety at all times.

All traffic control devices (including signs), warning devices and barriers shall be furnished by



the Contractor.

The Contractor shall provide the necessary safe access to all adjacent property during construction activities including but not limited, to entrances to all residences and business establishments within the project limit.

Special attention shall be given for directing the flow of pedestrian and vehicular traffic, especially in areas surrounding schools.

A State of Florida MOT Advanced Certified Technician is required for layout and maintenance of approved MOT plans. The MOT Certified Technician must be on site at all times and will be responsible for making all changes to MOT Plans and field conditions, if required.

Traffic may be detoured only upon approval of the Director of the Public Works Department (Note: Contractor must submit an MOT plan prior to closure of roads for review and approval by the Public Works Department). **SUCH MOT PLAN MUST BE SIMILAR TO THE ATTACHED "SAMPLE MOT SUBMITTAL".**

The total compensation under this item shall not exceed 2% of the Contract Base Estimate Amount. Payment shall be full compensation for all work and costs specified under this Section including furnishing, installing, operating, maintaining and removing all required traffic control devices, signs, warning devices, barriers and other MOT devices or requirements not specifically covered for payment.

Whenever a material, article or piece of equipment is identified on the Plans or in the Specifications by reference to manufactures' or vendors' names, trade names, catalog numbers, or otherwise, it is intended merely to establish a standard; and, any material, article, or equipment of other manufactures or vendors which will be perform or serve the requirements of the general design will be considered equally acceptable provided the material, article, or equipment so proposed, is, in the opinion of the Engineer, equal in substance, quality and function. It shall not be purchased or installed by the Contractor without the Engineer's prior written approval.

20. RETAINAGE

For Work Order Contracts, the retain age, unless otherwise stipulated within these Contract Documents, shall be ten percent (10%) of the total value of all work paid for to the date of the Work Order progress payment. However, at the written request of the Contractor, after fifty percent (50%) of the labor has been performed and fifty percent (50%) of the material has been delivered or incorporated into the Work Order, and if, in the opinion of the Engineer, satisfactory progress is being made in accordance with the current accepted schedule, the City may reduce the retain age to five percent on the current and remaining estimates. The Contractor may request further reduction of retain age subsequent to punch list completion or when the Work Order work is satisfactorily completed and the Contract is held open as a result of changes requested by the Engineer. The retain age that is deducted each month is reserved by the City as partial guarantee to ensure the full, faithful and timely performance of the work as exhibited in the Work Order, by the Contractor.

21. CLEARING AND GRUBBING-DEMOLITION/CLEARING/RELOCATION (FDOT SECTION



110)

The contract unit price bid as indicated in the Bid Form of the Proposal shall be full compensation for all work required for clearing and grubbing; including, but not limited to, removal of asphalt pavement, concrete pavement, sidewalks, driveways, asphalt aprons, concrete approaches, grass, soil, irrigation systems, drainage structures and pipes, vegetation, trees, trash, debris, tree trimming, cleaning and plugging of existing drainage system left in place within the entire length of the project and all other obstructions resting on or protruding through the surface of the existing ground and all other work related to clearing and grubbing. The contractor shall dispose of all debris in a legal manner. All trees and shrubs to remain within limits of the job site shall be protected, as indicated in the plans and/or as directed by the Engineer. Also included in this section shall be the grading and final dressing required to provide the necessary terrain configuration to facilitate an effective drainage run-off.

The Contractor shall coordinate all work as required by law, codes and/or regulations from agencies having jurisdiction.

The Contractor shall not include any costs incurred for any other type of work if payments for these items are specifically provided for in separate bid items.

22. REMOVAL OF EXISTING CURB AND/OR GUTTER

Work includes removal of existing curb and/or gutter and disposal of materials at legal sites. Material may be removed by either saw cutting the slab perpendicular to the long edge, or by any other means that will produce a clean neat cut (if at existing joint) or any other acceptable means to the Engineer. Price and payment under the applicable items below shall include all required saw cutting or means of removal.

Payment for this item shall be paid through the clearing and grubbing item.

23. REMOVAL OF EXISTING SIDEWALK

Work includes removal of existing sidewalk and/or asphalt path, disposal of materials at legal sites which have been pre-approved by the Engineer, and preparation of subgrade including any required filling, grading, leveling and compaction to meet the subgrade requirements of Section 145.04 of the Miami-Dade County Public Works Manual. Material may be removed by either saw cutting the slab perpendicular to the long edge, or by any other means that will produce a clean neat cut (if at existing joint) or any other acceptable means to the Engineer.

24. EARTHWORK AND RELATED OPERATIONS

01. Grading

Contractor shall include cost of all grading in the item bid price for the appropriate items.

02. Regular Excavations



Regular Excavation shall consist of the excavation and the utilization, of all materials necessary for the construction of the roadway, side ditches, and lateral ditches, within the roadway right-of-way, (including satisfactory disposal of excess material).

No separate payments will be made for any regular excavation on this project. All excavations shall be incorporated in each specific item as necessary to ensure the work is 100% complete.

03. Subsoil Excavations

A quantity for Subsoil Excavation has not been included in this project. Any work that falls within this specification is a contingent item to be utilized only upon the determination by City that unsuitable material has been found within the limits of construction and that it must be removed. The work consists of excavation of unsuitable material (and suitable if in conflict with removal of unsuitable) and replacement with approved suitable material to the original limits or as directed by the Engineer. Contractor shall include cost of satisfactory disposal of excess and/or unsuitable material.

04. Embankment

(From Contractor's Own Source, Including Grading) This item consists of providing clean suitable fill material in areas where the elevation of the existing ground must be raised to a higher elevation (6" below bottom of proposed sidewalk), in order to place the new sidewalk (or road widening if required).

Work under this item includes price of material from Contractor's own source, hauling, grading, and tamping as directed by the Engineer.

Measurement shall be made on a loose volume basis, as measured in trucks or other hauling equipment at the point of dumping.

If measurement is made in vehicles the Contractor shall level the material to facilitate accurate measurements. Suitable fill material for this item shall consist of clean granular material free to any clay, deleterious material or large rocks (nothing larger than 2-11/2 in. in the top 12 inches).

25. TYPE "B" STABILIZATION (FDOT SECTION 160)

Compaction -The density requirements for all embankment and subgrade involved in this Section shall be a minimum ninety five (95) percent for non-roadway areas and ninety eight (98) percent for roadway areas, of maximum density as determined by AASHTO T-180.

California Bearing Ratio Requirements: Suitability of the soil to be compacted shall be determined by the California Bearing Ratio Test as outlined in ASTM D 1883-87. Tests shall be made on each separate course, generally before the materials have been compacted. Any areas where the materials have a C.B.R. value of less than thirty (30) at ninety five (95) percent of the maximum density as determined by AASHTO T-180 shall be stabilized (or further stabilized) as specified herein.

There shall be no undertolerances in the C.B.R. permitted.



Payment for stabilizing including all labor and materials shall be made at the Contract Unit Price Bid as indicated in the Bid Form of the Proposal. If minor stabilization is required for roadway work as part of this project, it shall be included in the price for rock base.

Such price and payments shall constitute full compensation for all work specified in this Section for Type "B" Stabilization, including furnishing, spreading and mixing of all stabilizing material required and any reprocessing of stabilization areas necessary to attain the specified bearing value.

26. PREPARED SOIL LAYER (FDOT SECTION 162)

Not Used

27. ROCK BASE

DESIGN CRITERIA FOR ROADWAY BASE and SUBGRADE

(a) Requirements

Roadway subgrade shall not have a thickness, bearing ratio, or density less than the following:

Type of Roadway	Compacted Stabilized Subgrade Thickness	Florida Bearing Value	Limerock Bearing Ratio	Minimum Density AASHTO T-180
Local	12"	60	40	98% Proctor
Collector	12"	60	40	98% Proctor

(b) Construction

The construction of the stabilized subgrade shall conform to the FDOT Standard Specifications for Road and Bridge Construction, latest edition. The use of a reinforcing geofabric may be considered for application below the subgrade to help obtain the required compaction, subject to the approval of the Public Works Director. The fabric shall meet the specifications of FDOT, Standard Specifications for Road and Bridge Construction.

(c) Testing

Test points for the subgrade bearing capacity and compaction shall be located no more than four hundred (400) feet apart and shall be staggered to the left, right, and on the centerline of the roadway. The test results shall be submitted by the Engineer of Record to the Public Works Department. When, in the judgment of the Public Works Director, conditions warrant additional testing, the Engineer of Record will be advised that additional tests will be required and the extent of such additional tests. Such tests shall be in accordance with the provisions of the FDOT Standard Specifications for Road and Bridge Construction or other applicable testing requirements.

BASE COURSES FOR FLEXIBLE PAVEMENTS

(a) Base course material normally used is limerock. Other alternate base course materials may



be considered for use for special design conditions with the approval of the Public Works Director. These alternate materials include any FDOT approved base course. All materials and construction shall conform to FDOT Standard Specifications for Road and Bridge Construction, latest edition. If limerock base material is approved for construction, the thickness and density shall not be less than the following:

Type of Development	Compacted Base Depth	Minimum Density AASHTO T-180
Local	6"	98% Proctor
Collector	8"	98% Proctor

(b) If an alternate base material is approved for use, equivalent minimum densities must be achieved.

(c) Base materials and plant mixes including plant, methods & equipment shall be certified in accordance with the FDOT Standard Specifications for Road and Bridge Construction, latest edition. Base materials and plant mix certifications shall be submitted to the Public Works Department by the Engineer of Record for review.

Soil cement base shall have a seven (7) day compressive strength of a minimum of 150 psi. In no case shall soil cement base thickness be less than six (6) inches for residential development and eight (8) inches for industrial development. Test cores shall be taken at twenty-one (21) days, have a strength of a minimum of 300 psi, and be taken at locations of high groundwater and other locations as deemed necessary by the Engineer of Record. Only a plant mixed soil cement base will be allowed; mixed in place soil cement base will not be allowed. Soil cement base shall have a seven (7) day minimum curing time prior to paving.

(d) **Testing**

Tests for base thickness and density shall be located no more than four hundred (400) feet apart and shall be staggered to the left, right, and on the centerline of the roadway. Test reports for thickness and density shall be submitted to the Public Works Department by the Engineer of Record. When, in the judgment of the Public Works Director, conditions warrant additional testing, the Engineer of Record will be advised in writing that additional tests will be required and the extent of such additional tests.

(f) **Prime and Tack Coats**

All bases shall be primed in accordance with the FDOT Standard Specifications for Road and Bridge Construction, latest edition. Tack coats shall not be required on primed bases, except on areas, which have become excessively dirty and cannot be cleaned or in areas where the prime has cured and lost all bounding effect. Tack coat material and construction methods shall conform to the FDOT Standard Specifications for Road and Bridge Construction, latest edition.

SURFACE COURSE FOR FLEXIBLE PAVEMENTS

(a) **Requirements**

Hot bituminous mixtures – plant, methods, & equipment shall conform to FDOT Standard Specifications for Road & Bridge Construction. Surface courses for flexible pavements



shall be Asphaltic Concrete Type S and shall meet the following minimum thickness requirements.

Roadway Classification	Asphaltic Concrete Surface Course
Local Street	1 1/4"
Collector Street	1 1/2"

- (b) **Materials and Construction**
Asphaltic Concrete Type S, including prime and tack coats, shall conform to the FDOT Standard Specifications for Road and Bridge Construction, latest edition, for materials and method of construction.
- (c) The method of determining the roadway sub-base and pavement thickness has been calculated by the structural number criterion as set forth in the "Flexible Pavement Design Manual" prepared by FDOT.

Where the Contractor desires to present an alternate combination of roadway subgrade, base and pavement design typical section, the structural number of the alternate roadway section shall meet the structural number criteria established by FDOT. The Public Works Director reserves the right to either approve or disapprove such alternate roadway typical section.

NOTE: The areas of base course to be measured for payment shall be included within the areas of extra roadway pavement restoration required at various intersections. The cost of replacing base materials removed only for the construction of underground items shall be included in the bid price for the various underground items.

28. ASPHALT BASE COURSE (Section 280) (FDOT 2000 Edition)

The engineer will require Minimum of 6 inches thick in 3 inches layers.

29. PRIME AND TACK COATS FOR BASE COURSES (FDOT SECTION 300)

A prime coat is required for all limerock base construction and the cost will be included in the unit bid price utilizing the limerock base per square yard. No separate payment shall be made for the prime coat or its application.

30. HOT BITUMINOUS MIXTURES (FDOT SECTION 330)

A tack coat shall be applied to previously primed and newly constructed bases, existing wearing surfaces, milled surfaces and previously applied leveling courses. The rate of application shall be between 0.02 and 0.08 gallon per square yard. For the tack coat applied on concrete pavement which is to be surfaced, the rate of application may exceed the upper limits, when approved by the Engineer. Tack Coat for FC-3 shall be RS-1.

~~Before spreading any leveling course, fill all depressions in the existing surface more than 1 inch [25mm] deep by spot patching with leveling course mixture, and then compact them thoroughly.~~

Leveling courses, when required by these documents or the Engineer, shall be rolled after application. Special leveling course spreading and application equipment and methods,



different from that required in the specifications, may be used only after demonstration, inspection and testing by the Engineer or approved laboratory, and subject to the Engineer's approval. Leveling courses and final wearing surface courses shall be applied in thicknesses as directed by the Engineer. In certain areas where a leveling course is required, the Engineer may specify that the application be by hand.

When the total asphalt mix provided for leveling exceeds fifty (50) pounds per square yard, place the mix in two or more layers, with the average spread of any layer not to exceed fifty (50) pounds per square yard. When using type S-III Asphaltic Concrete for leveling, do not allow the average spread of a layer to be less than fifty (50) pounds per square yard or more than seventy five (75) pound per square yard. The quantity of mix for leveling shown in the plans represents the average for the entire project; however, the Contractor may vary the late of application throughout the project as directed by the Engineer. When leveling in connection with base widening, the Engineer may require placing all the leveling mix prior to the widening operation.

31. TYPE S ASPHALTIC CONCRETE (FDOT 2000 Edition)

Where hand placing and finishing of Type S Asphaltic Concrete is permitted for small and irregular areas, such as turnouts, crossovers, acceleration and deceleration lanes, etc., the portion of the Grade No. 16 coarse aggregate retained on a No. 4 sieve may be omitted from the mixture and the percent by weight of the coarse aggregate passing the No. 4 sieve and retained on the No. 10 sieve shall be within the range specified for the total coarse aggregate in the mix.

No work shall be started on this portion of the Contract until the Contractor has conferred with the Engineer and, if deemed necessary, has submitted samples of all materials to be used to a laboratory approved by the Engineer for either;

1. Preparation and establishment of a job mix formula, or
2. The verification of conformity to specifications of a job mix formula submitted by the Contractor, if the plant has previously operated in conformity with the same material specifications as used in this Contract.

When the quantities of Type S Asphaltic Concrete are to be paid for by the ton, as called for in the proposal, the pay quantities shall include only the weight of the asphalt in place, completed and accepted. In determining the tonnage to be paid for, the weights of the mixture shall be determined from batch weights, truck scale weights, or other methods approved by the Engineer.

Payment for all bituminous material, including tack coat, shall be included in the payment for Asphaltic Concrete. Such payment shall be based on the Contract bid price indicated in the Proposal.

The Contract Unit Bid Price, as indicated in the Bid Form of the Proposal, shall be full compensation for all work specified under this Subarticle (including the applicable requirements of Sections 320 and 330).

NOTE: The Contractor shall adjust all Storm Water And Water and Sewer Valves and



Manholes prior to resurfacing as required by the Engineer.

32. MISCELLANEOUS ASPHALT PAVEMENT (FDOT SECTION 339)

For the pavement, use any plant-mixed hot bituminous mixture meeting the requirements of a mix design verified by the Engineer, except do not use open-graded friction course (FC-3). For bicycle paths, use a mixture that produces a finished pavement which will not distort or mar under bicycle or mower wheel loads.

No work shall be started on this portion of the Contract until the Contractor has conferred with the Engineer and if deemed necessary has submitted samples of all materials to be used, to a laboratory approved by the Engineer for either:

1. Preparation and establishment of a job mix formula, or
2. The verification of conformity to specifications of a job mix formula submitted by the contractor, if the plant has previously operated in conformity with the same material specifications as used in this Contract. After the job mix formula is established, the mixture used for work on this portion of the contract shall meet the approved formula with the tolerances indicated in Subarticle 331-5.2 of the 2000 Edition of the FLORIDA DEPARTMENT OF TRANSPORTATION'S Standard Specifications for Road and Bridge Construction.

The quantity determined as provided in Subarticle 339-7 will be paid for at the contract unit price bid for Miscellaneous Asphalt Pavement. Such price and payment shall be full compensation for all work specified in this Section including applicable requirements of Sections 320 and 330, shaping and compacting the foundation, soil sterilization treatment, furnishing of bituminous material used in mixture, cutting of holes through completed pavement and bituminous patching required for guardrail post installation, and shaping of adjacent earth surfaces.

33. ADJUSTMENT OR RELOCATION OF VALVE, METER, JUNCTION BOXES, FIRE HYDRANTS others (FDOT SECTION 425)

The work under this section includes the removal, relocation, and/or adjustments to utility equipment (i.e. manhole covers, water valves, hydrants, other) and systems within the proposed project limits or that may be impacted by the work being performed by the Contractor.

The work under these pay item includes any adjustments (raising, or lowering) of existing boxes, valves, manholes. When relocation of the box is required, the Contractor shall make all necessary arrangements with the utility companies, as the utility companies are responsible to relocate the valves and meters and valve and meter boxes.

~~Fire hydrants, water valves, other water distribution system within the work area shall be relocated by the Utility upon coordination of the Contractor with the Utility.~~

Contact Mr. Aleem Ghany, Public Works Director for information and utility preconstruction meeting. Telephone: 305-895-9838.



34. **CATCH BASIN, FIELD DRAIN AND STUB PIPES**

Contractor shall field verify the existing storm water runoff patterns and ensure that through the installation of the proposed curb and gutter systems that the drainage system continues to perform adequately and that the system is not in any way impacted. Contractor has been provided with surveys for each intersection. These surveys include elevations and locations of existing features which are conducive to a proper drainage system in the area.

Refer to curb and gutter for more information.

35. **PITCHING SWALE**

Where Contractor properly installs curb and gutter to a location where no catch basin exists, the Contractor will be required to properly pitch the swale to receive any stormwater runoff. The pitching of the swale will include removing material sufficient to pitch the swale 2% toward the center away from the road and the sidewalks and restoring it as necessary. Restoration shall include but shall not be limited to, placing proper soil and sod and coordinating with the residents as may be necessary.

Based on the observations of the City staff, if in any event, the Contractor fails to properly install the curb and gutter system by disrupting the intended stormwater flow and runoff flows away from its intended basin, the Contractor shall be responsible to pay for the cost of correcting the drainage issue in a manner acceptable to the engineer.

36. **CONCRETE GUTTER, CURB ELEMENTS, AND TRAFFIC SEPARATOR (FDOT SECTION 520)**

The work specified under this section includes labor, equipment, and material for the installation of type F, B, and D curb and /or gutter in accordance with FDOT Design Standards for Design, Construction, Maintenance and Utility Operations on the State Highway System 2006 and the Public Works Manual of Metropolitan Dade County (Standard Road Details R.14.1 and. R.14.2), including the necessary preparation and compaction of the subgrade in both cut and fill areas, as well as backfilling, grading, excavation and final dressing required as directed by the Engineer.

Work shall include proper curb and gutter pitch to ensure that no ponding/flooding occurs in the improved intersection or at the edges or beyond the work area. All stormwater run-off shall be directed toward existing drains (where existing) or swale areas approved by the engineer prior to work being performed. Contact Mr. Aleem Ghany, Public Works Director for information on stormwater patterns in the area. Telephone: 305-895-9838.

All anticipated stormwater runoff shall be directed to existing drains where they exist. Contractor shall ensure that the existing catch basin to remain are not more than 2 inches lower than the asphalt road immediately around them. Pitching of the asphalt surrounding any catch basin shall not exceed 2% without the written consent of the engineer.



Where drains do not exist and the runoff is directed to existing swales, such swales shall be panned and pitch at 2% slopes to a minimum of 20' beyond the limits of the construction.

Class I Concrete shall have a minimum compressive strength of 3,000 p.s.i. at 28 days.

The quantity of curb or curb and gutter, shall be paid for at the Contract unit price for the quantities completed and accepted by the Engineer and does not include ramp and sidewalk curb. Such price and payment shall be full compensation for all work specified under this Section, including the necessary preparation and compaction of the subgrade in both, cut and fill areas, as well as backfilling, grading, excavation and final dressing required as directed by the Engineer.

Payment for Type "D" curb shall also include labor, equipment, and material for the splitter island which shall be formed concrete. No separate pay item shall be used for the splitter islands.

37. CONCRETE SIDEWALK (FDOT SECTION 522)

The work specified under this Section consists of the forming, furnishing, placement, and finishing of concrete for the construction of concrete sidewalks, pedestrian ramps and sidewalk curbs (back of sidewalk) utilizing Class I Concrete. The width, thickness and type shall be similar to existing at locations depicted on the conceptual drawings and as established by the engineer. Newly installed sidewalk shall match existing surfaces where match is required. All work will be in accordance with this Section except as modified herein.

Class I Concrete shall have a minimum compressive strength of 3,000 p.s.i. at 28 days.

The quantity to be paid for under this Section shall be the area in square yards of concrete sidewalk and pedestrian ramps, measured in place, complete and accepted. Measurement shall be the final dimensions measured along the surface of the completed work within the neat lines shown on the Plans or designated by the Engineer. No deduction will be made for the area occupied by trees left within the area of sidewalks or for any area occupied by manholes, inlets or other drainage or public utility appurtenances within the sidewalk area.

The quantity, determined as provided above, shall be paid for at the Contract unit price for the quantities completed and accepted by the Engineer. Such price and payment shall be full compensation for all work specified under this Section, including the necessary preparation and compaction of the subgrade in both, cut and fill areas, as well as backfilling, grading, excavation and final dressing required as directed by the Engineer.

~~When curb and gutter is required for the construction of pedestrian ramps and no specific pay item has been included for the construction of the curb and gutter, such payment shall be included in the pay item for Sidewalk (including concrete placement at pedestrian ramps and sidewalk curbs).~~

No separate payment shall be made for the removal of forms or the filling of excavated area



left by removal of forms. Contractor shall be responsible for any vandalized sidewalk until it is finally accepted by the Engineer.

38. **DETECTABLE WARNINGS ON WALKING SURFACES (FDOT SECTION 527)**

It shall be the policy of the Public Works Department to use "Safety Yellow" as the preferred finishing color over the truncated domes detectable surface.

Use safety yellow as the preferred color (US-ANSI 2535.1-1991, 6.3; International-ISO 3864-1984(3)) as described in the drawings or as approved by the Engineer. The color must be integral with and consistent throughout the material.

Contractors are advised that for Curb Ramp Detectable Warning Surface (Truncated Domes), the following manufacturers have products that have been evaluated by the Public Works Department:

Engineered Plastics Inc., Armor Title-Tactile
Strongwall Industries, Inc., Strongwarn 2000
Vanguard ADA Systems of America, Detectable warnings (Truncated Dome)
ADA Solutions, Inc., Detectable warnings (Truncated Dome)
Detectable Warning Systems, Inc., DWS E-Z set

or approved equal, at the option of the Contractor as long as it is submitted in writing and the product meets or exceeds the specifications herein and is accepted by the Engineer. **DWS shall be CAST-IN-Place and installed according to manufacturer's specifications.**

Price and payment will be full compensation for all work specified in this Section, including all labor, surface preparation, materials and incidentals necessary to complete the work shall be included in the price for DWS.

39. **SODDING (FDOT SECTION 575)**

The contractor shall provide material, labor, and equipment to install replacement sod where necessary, to water and maintain newly sodded areas as needed and adhere to the following minimum frequencies until final acceptance of the project by the City:

The payment for mowing, maintaining the sod in a moist condition for a period of at least two weeks, as well as payment for the water shall be included in the contract unit price bid for Landscaping, as indicated in the Bid Form of the Proposal.

NOTE: Fertilizer and mulching shall not be required.

40. **IRRIGATION SLEEVES**

Two (2) - 4" Schedule 40 PVC pipe shall be placed from center of City swale to center of circle (approximately 60'). Actual crossing location shall be selected by Parks and Recreation – contact Keith Miller, Parks Supervisor at 305-891-9334. Determination of the crossing shall be based on location of FPL drop necessary for the irrigation meter.



41. LANDSCAPING, WATER METERS, BACKFLOW DEVICES, IRRIGATION, and ELECTRICAL DROPS

DESCRIPTION:

- A. Work: Provide an underground irrigation system to provide 100% coverage with 75 to 100% overlap with minimal overspray on non-landscaped areas, and provide a precipitation rate of 1" per hour. **Contractor shall be responsible for all required engineering, drawings, calculations, etc. as required by North Miami Building and Zoning to secure all permits and ensure all work passes inspections.**

The work includes:

- Coordinate water meter installation through the City of North Miami Water Department, paying all applicable fees; for a ¾ inch meter installed
- Install Irrigation Controller mounted in a NEMA 3 lockable enclosure
- Install Automatic irrigation system including piping, fittings, sprinkler heads, and accessories
- Install Electric remote control valves
- Install Control wires
- Excavating and backfilling irrigation system work.
- Install Rain sensors
- Complete Electrical (Unistrut system and FPL Drops)

PROJECT CONDITIONS:

- A. Protect existing trees, plants, lawns and other features designated to remain as part of the final landscape work.
- B. Promptly repair damage to adjacent facilities caused by irrigation system work operations. Cost of repairs at Contractor's expense.
- C. Promptly notify the City of unexpected subsurface conditions.

MATERIALS:

A. PLASTIC PIPE, FITTINGS AND CONNECTIONS:

1. Polyvinyl chloride pipe: ASTM D2241, rigid, PVC. Provide pipe homogeneous throughout and free from visible cracks, holes, foreign materials, blisters, wrinkles and dents.
 - a. Lateral Lines: Schedule 40
 - b. Main Lines: Schedule 40
2. PVC pipe fittings: ASTM D2241 Schedule 40 PVC molded fittings suitable for solvent weld. Fittings made of other materials are not permitted.



3. All pipe under paved areas will be sleeved with Schedule 40 PVC (two sizes larger than pipe being sleeved).

B. ELECTRICAL CONTROL WIRE:

1. Electrical control and ground wire: Type UF 600 volt, direct burial, single conductor, AWG #14, or larger.
2. Wire color code: Provide control or "hot" wires red in color. Provide common or "ground wires white in color.

ACCESSORIES:

- A. **VALVE ACCESS BOXES:** Tapered enclosure of rigid plastic material comprised of fibrous components chemically inert and unaffected by moisture corrosion and temperature changes. Provide lid of same material, green in color.

INSTALLATION:

- A. Provide approved earth fill or sand to a point 4" above the top of the pipe.
- B. Fill to within 6" of final grade with approved excavated fill materials free of lumps or rocks larger than 3" in any dimension.
- C. Provide approved clean soil free of rocks and debris for top 6" of fill.
- D. Install irrigation mains with a minimum cover of 18" based on finished grades. Install irrigation laterals with a minimum cover of 12" based on finished grades.
- E. Excavate trenches and install pipe and fill during the same working day. Do not leave open trenches or partially filled trenches open overnight.

F. PLASTIC PIPE:

1. Install plastic pipe in accordance with Manufacturer's installation instructions. Provide for thermal expansion and contraction.
2. Saw cut plastic pipe. Remove burrs and shavings at cut ends prior to installation.
3. Make plastic to plastic joints with solvent weld joints. Use heavy duty gray solvent for all solvent weld joints. Install plastic pipe fittings in accordance with pipe manufacturer's instructions.
4. Make plastic to F.P.T. joints with schedule 80 PVC nipples.
5. Allow joints to set at least 24 hours before pressure is applied to the system.

G. SPRINKLERS, FITTINGS, VALVES AND ACCESSORIES:

1. Install fittings, valves, sprinkler heads, risers and accessories in accordance with manufacturer's instructions, except as otherwise indicated.
2. Set sprinkler heads perpendicular to finished grades.



- 1) Provide pop-up spray heads with an adjustable double swing joint riser assembled by the use of at least 3, ½", Marlex 90 degree ells. Fabricate double swing joint risers of schedule 80 PVC nipples and Marlex 90 degree ells. (1812 DETAIL) Side inlet on 1812 sprinkler heads may be utilized.
- 2) Located sprinkler heads to assure proper coverage and overlap.
- 3) Install risers for spray heads in shrub or flower bed areas and planters of sufficient height to prevent interruption of the stream by the plant material. *See Riser Detail*
- 4) Provide risers of ½" schedule 40 PVC pipe, S.S. pipe clamped to ¾" aluminum angle and painted flat black.
- 5) Install controller per manufacturer's requirements.
- 6) Install in-ground control valves in a valve access box.
- 7) Install valve access boxes on a suitable base of gravel to provide a level foundation at proper grade and to provide drainage of the access box.
- 8) Seal threaded connections on pressure side of control valves with Teflon tape or approved plastic joint type compound.

H. CONTROL WIRING:

1. Install all electric control wires in appropriately sized electrical PVC conduit in the piping trenches wherever possible. Where necessary to run wire in a separate trench, provide a minimum cover of 12".
2. Provide sufficient slack at site connections at remote control valves in control boxes and at all wire splices to allow raising the valve bonnet or splice to the surface without disconnecting the wires when repair is required.
3. Connect each remote control valve to one station of a controller.
4. Connect remote valves to common ground wire system.
5. Make wire connections to remote control electric valves and splices of wire in the field, using wire connectors and sealing cement in accordance with manufacturer's recommendations. There are to be no in ground splices.
6. Provide tight joints to prevent leakage of water and corrosion build-up of the joint.

I. FLUSHING, TESTING AND ADJUSTMENT:

1. After sprinkler piping and risers are installed and before sprinkler heads are installed, open control valves and flush out the system with full head of water.
2. Perform system testing upon completion of each section. Make necessary repairs and retest repaired sections as required.
3. Adjust sprinklers after installation for proper and adequate distribution of the water over the coverage pattern. Adjust for the proper arc of coverage.
4. Tighten nozzles on spray type sprinklers after installation. Adjust sprinkler adjusting screw on lateral line or circuit as required for proper radius. Interchange nozzles' patterns as directed by the Architect to give best arc of coverage.
5. Adjust all electric remote control valve flow control stems for system balance.
6. Test and demonstrate the controller by operating appropriate day, hour, and station selection features as required to automatically start and shut down irrigation cycles to accommodate plant requirements.



ACCEPTANCE:

- A. Test and demonstrate to the City the satisfactory operation of the system free of leaks.
- B. Instruct the City's designated personnel in the operation of the system, including adjustment of sprinklers, controller (s) and valves.
- C. Upon acceptance, the City will assume operation of the system.
- D. Provide the City with complete operating instructions and product information for all components of the system.
- E. The contractor shall provide the Owner with an 'As Built' drawing of the system as installed, indicating any adjustments made in the field during the installation of the system.
- F. Contractor is required to schedule and pass all plumbing and electrical inspections.

GUARANTEES:

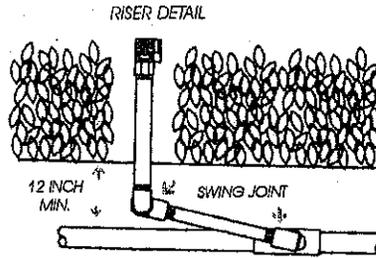
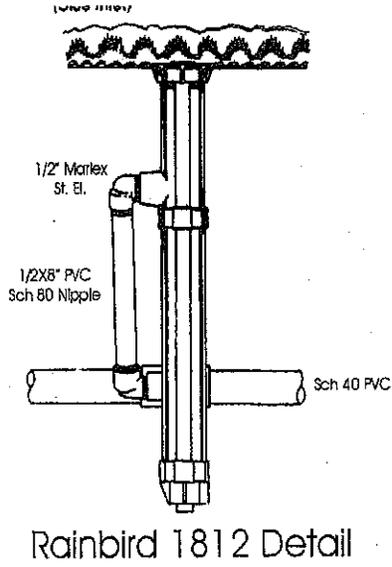
The contractor shall furnish warranties in writing certifying that the quality and workmanship of all materials and installation furnished is in accordance with these specifications and in accordance with the original manufacturers' warranties. Contractor shall further see to the fulfillment of all manufacturers' warranties. Contractor shall warrant the installation workmanship for a period on one (1) year from date of completion of acceptance of the job or any accepted portion of the job.

CLEANING:

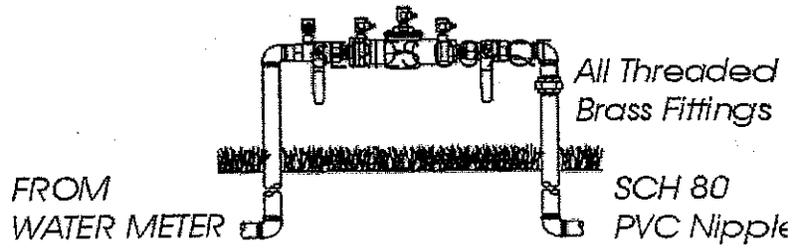
Perform cleaning during installation of the work and upon completion of the work. Remove from site all excess materials, soil, debris, and equipment. Repair damage resulting from irrigation system installation.

ACCEPTABLE COMPONENTS:

- A. Rainbird valves PESB series.
- B. Rainbird heads 1800 (12") series with appropriate nozzles, with appropriate MPR nozzles.
- C. Rain Sensor, RSD-CEX.
- D. Rainbird ESP-4M- Outdoor 120V, 4 station controller
- E. Valve access boxes: Tapered enclosure of rigid plastic material comprised of fibrous components chemically inert and unaffected by moisture corrosion and temperature changes. Provide lid of same material, green in color.
- F. WATTS PVB 009QT or approved equal by North Miami Water and Sewer.



BACKFLOW DETAIL
WATTS SERIES 009QT





ELECTRICAL SERVICE FOR TRAFFIC CIRCLES

DESCRIPTION:

Contractor shall provide complete electrical system necessary to ensure the intent of the project is met and accepted by the City. The electric panel and irrigation controller will be installed in a NEMA 3R steel enclosure with hinged hasp and staple cover. Service and enclosure shall be mounted on a pedestal constructed on Unistrut posts with cross members. NEMA 3R steel enclosure shall be large enough to house electric circuit panel and irrigation controller.

ELECTRICAL:

General:

- Contractor shall construct a complete operational electrical system.
- Contractor shall pay for and coordinate service drops with FP&L.
- Contractor shall install electric conduit from the FPL pole to the new City electric meter in the planter. Meter can and weatherproof enclosure shall be mounted securely on pedestal in the planter. Conduit from the riser to the meter can shall conform to FPL specifications.
- Conduit shall be installed from the pole to planter as approved by FP&L. See attached pole locations.
- Conduit may be installed via a trencher, or directional boring.
- Conduit under asphalt or concrete shall be 2" schedule 40 PVC approved electrical conduit. All conduits shall be installed at a depth that conforms to FPL specifications or 24" minimum, whichever is greater. Installation of conduit shall be done in compliance with FDOT std., and FPL specifications, including proper bedding and fill around the conduit, compaction and closures of the trench.
- All joints shall be glued with heavy-duty cement.
- Pedestal shall be 1 5/8" Unistrut stakes with 3/4" Unistrut cross members. Unistrut stakes shall be painted with "BITUMASTIC 50" paint (or approved equal) to six inches above grade.

Materials:

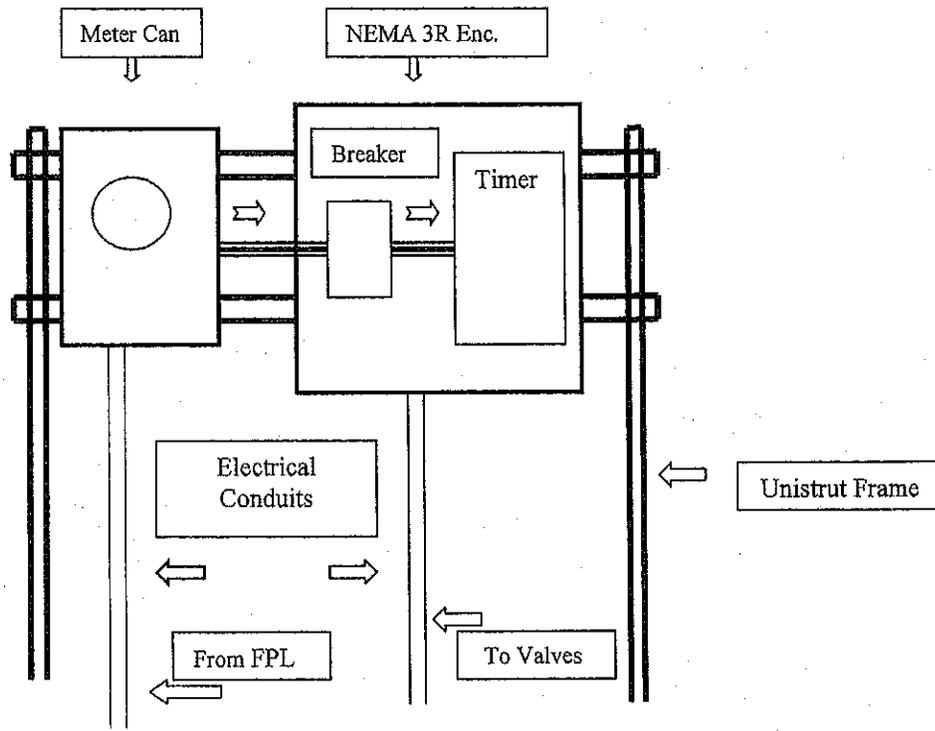
- All equipment shall be Underwriters Laboratory approved and in new condition. No remanufactured components shall be accepted. All components shall be manufacturer's specified or equivalent design and finish.
- Enclosures shall be of durable finish in galvanized or factory enamel paint finish. Site finish will not be accepted.
- Electric conduit shall be galvanized heavy wall or intermediate rigid conduit above ground and shall be painted with "BITUMASTIC 50" paint (or approved equal) to six inches above grade. Below grade conduit shall be buried at a depth not less than 24." Conduit elbows shall be field bent with manufacturer-approved bender or be factory pre-bent. All fittings shall be threaded. No setscrews or compression fittings shall be accepted.



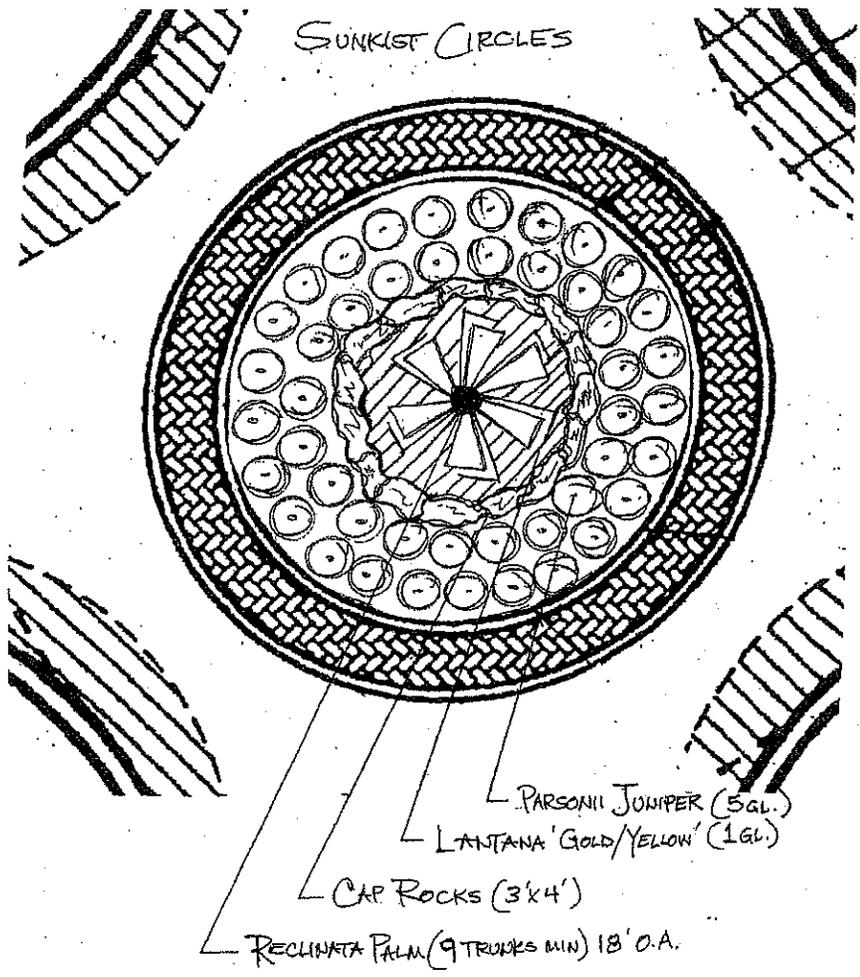
- All conductors shall be stranded copper, and sized for load. Insulation shall be THWN rated. All terminations shall be 75 degree Celsius rated or higher. No aluminum shall be accepted.

Execution:

- Service shall be underground lateral from FPL riser to the service meter. Conduit shall be 2" PVC (sch. 40) underground and rigid above ground. Contractor shall cut and repair concrete or asphalt surfaces as needed to facilitate conduit installation.
- Meter enclosure shall be Landis and Gyr, cat. #UAT131-OG with cover plate #56933-1.
- Service disconnect shall be 20 AMP breaker, Square D or equivalent to be mounted within the Hoffman weatherproof enclosure. The service disconnect shall be connected to the meter enclosure by rigid conduit, 3/4" trade size. Conductors shall be 3, #10. Threaded bushings shall be installed.
- The service shall be grounded by driven ground rods (2). Ground rods shall be 5/8" x 10' copper clad. Grounding electrode conductor shall be #6 copper. Grounding electrode conductor shall be run inside of 1/2" rigid trade size conduit. Connection shall be CADWELD type GR or GT connections for direct burial application.
- Contractor shall install the Hoffman, NEMA-3R, general equipment weatherproof enclosure adjacent to the meter enclosure. Enclosure shall be sized to contain the electrical breaker, and irrigation system controller (7 1/2"width, 4 1/2"depth, 9" height).
- All electrical shall conform to the City of North Miami codes and all other local, state and national ordinances.
- The contractor is responsible for providing adequate drawings, and specifications required by the City of North Miami Building and Zoning to obtain the appropriate building permits.



TRAFFIC CIRCLE LANDSCAPING





SCOPE OF WORK:

The work covered under this contract consists of furnishing all labor, material, and equipment to deliver and install the following plants on site on a per circle basis:

PLANT LIST:

Phoenix Reclinata; Reclinata palm (multi-stem 9 trunks minimum; 18' OA min.)

SPECIAL NOTE: Palm shall have an irrigation riser secured and extending above the top of the palm canopy terminating with a spinner/rotor type head that will cover the entire canopy with water and shall be hook to a separate zone. Additionally, there are to be four adjustable head/nozzles around the palm root ball connected to the same zone. This is temporary and will be removed by the City at a later date.

Juniperus chinensis; Parsonii Juniper (5gl. full)

Lantana montevidensis; Yellow Lantana (1Gl. full)

Cap Rock (flat tops 3'x4' or greater, but uniform throughout); **broken or non-uniform rocks will be rejected.**

GENERAL:

All Plant material shall be Fla. #1 or better as defined in the "Grades and Standards for Nursery Plants" published by the *Florida Department of Agriculture and Consumer Services*. The contractor shall provide a Special Warranty in letter or certificate form addressed to the City of North Miami, guaranteeing that the plant materials be maintained in a healthy, vigorous, watered condition for one (1) year after the completion of all initial planting. Contractor is responsible for obtaining utility locations prior to excavating. City of North Miami will not be responsible for any damage done to any utility or private property by the Contractor.

TREE REMOVALS:

1. **A permit for tree removal will be required.** Contractor must obtain and pay necessary fees.
2. The trunk and root systems may be ground down.
3. Sand shall be installed to restore a level grade, and sod installed.
4. Canopy replacement will be required at the rate of one for one.
5. Replacement trees shall be 12 to 14 feet tall, *Quercus virginiana*, rated Florida No. 1 or better
6. Replacement trees shall be delivered to the North Miami Parks Operations Center, 12181 NE 13 Avenue.

INSTALLATION:

*Contractor is responsible for obtaining utility locations prior to excavating. Bidder shall install palms in locations marked by the Parks Department. Set palm level with its original grade. Palms shall not be plugged and set as indicated on-site. Palms shall be thoroughly watered in to eliminate all air pockets. A 6 inch high rim of dirt shall be installed around the edge of the excavated hole to form a saucer shape which will hold water around the root ball. The top 1/3 of



burlap shall be removed from the root ball prior to final filling. Fertilizer shall be applied around the edge of the backfilled hole and then covered with a 3 inch layer of mulch, which will extend from the outside of the rim of the saucer to the base of the palms. Palms shall be braced to insure their stability for the guarantee period. (See attached staking detail)

MATERIALS:

Palms shall be field grown in marl, and balled and burlaped with the heads to be full and of good color. Palms shall be free of scars, lesions, un-uniformed rings, receding trunk around root initiation zone, penciling, etc. Fertilizer: Shall be a granular mixture of 12-4-12 with Minors or equal applied evenly around the top of the water retention ring after backfilling and before mulching. Soil: Backfill planting holes after trees are set with a soil mix consisting of a homogenous mixture of 40% sand, 25% Canadian peat moss, 20% sterilized soil, 15% pine bark, *mixed with 50% of soil from the excavated hole*. All areas need to be free of all debris and rocks and mulched with Cypress or Melaleuca mulch to a depth of 3".

POST MAINTENANCE:

The Contractor is responsible for all maintenance of the landscaping during the guarantee period of one year. This includes but is not limited to: (weeding, re-mulching, re-staking and trimming (if required), water retention saucer repair, watering, etc.)

SPECIAL WARRANTY

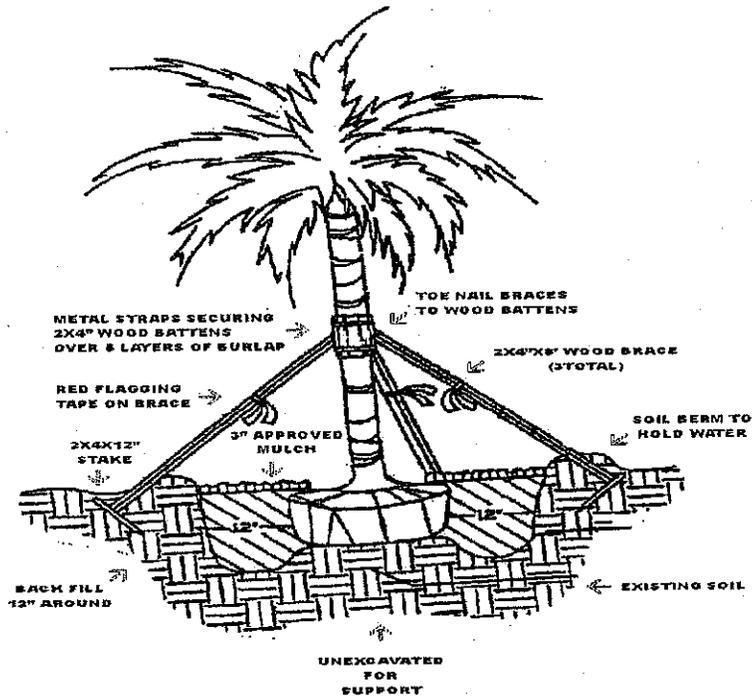
The contractor shall provide a Special Warranty in letter or certificate form addressed to the City of North Miami, guaranteeing that the plants will be maintained in a healthy, vigorous, watered condition for one (1) year after completion of all initial planting. Any plants which die are to be replaced immediately and guaranteed for an additional one (1) year. Any plant not in healthy, vigorous, growing conditions after one (1) year shall be replaced by the contractor at the discretion of the City. The terms of the warranty shall extend to cover all replacement materials.

The size, quality and grade of replacements: shall be the same as the current size of surviving plants and of the same species, and same quality as the plants originally specified.

The contractor will also be required to provide sufficient watering, weeding, and trimming as necessary to maintain the trees in a healthy vigorous growing condition for one (1) year.

The contractor shall submit the signed Special Warranty along with the billing invoice. A 10% withholding fee shall be implemented and shall be redeemable upon satisfactory completion of this agreement.

STAKING DETAIL



PALM PLANTING DETAIL

NTS



42. ARCHITECTURAL CONCRETE PAVERS (FDOT SECTION 526)

Description

Furnish and install architectural pavers to meet ASTM C936 and bedding material manufactured to ASTM standards. Other necessary elements and pay items of this type of paving, such as edge restraints, base and sub base materials are not covered in this Section.

Materials

General

Architectural pavers shall meet the following requirements:

Proposed Use	ASTM C 902 (Brick Paver)	ASTM C 1272 (Brick Paver)	ASTM C 936 (Concrete Paver)
Roadways	Do Not Use	X	Do Not Use
Commercial Driveways	Do Not Use	X	X
Sidewalks and Medians	X	Do Not Use	X
Residential Driveways	X	Do Not Use	X

Ensure that the pavers are consistent in color, size and appearance. Architectural paver manufacturer, type, pattern, shape and/or color will be in accordance with plan details, when specified.

Architectural Pavers – Roadway

For installations on roadways and commercial driveways, provide architectural pavers having a minimum thickness of 3 1/8 inch.

Architectural Pavers – Sidewalk

For installations on sidewalks, medians and residential driveways, provide architectural pavers having a minimum thickness of 2 3/8 inch.

Bedding and Joint Sands

Provide clean, non-plastic bedding and joint sand, free from deleterious or foreign matter, natural or manufactured from crushed rock.

Ensure the bedding sand meets the grading requirements of ASTM C 33 Standard Specification for Concrete Aggregate.

Ensure the joint sand meets the grading requirements of ASTM C 144 Standard Specification for Aggregate for Masonry Mortar.

Bedding sand may be used for joint sand. Do not use joint sand for bedding sand.



Bedding and Joint Grouts

A suitable grout, in thickness specified by the manufacturer and approved for use by the Architectural Paver manufacturer, may be substituted for either bedding sand, joint sand or both when specified in the plans and approved by the Engineer.

Construction Methods

General

Submittals

For Architectural Pavers – Roadway, furnish full size samples to the Engineer for approval prior to beginning placement. For Architectural Pavers - Sidewalk, provide the Engineer a certification that the architectural pavers meet the requirements of this Section. In addition, for all architectural pavers, submit a certified sieve analysis for gradation comparing results of the bedding sand and joint sand with the requirements of ASTM C33 or ASTM C144 as applicable.

Mock-ups

Prior to beginning placement, install a 6 by 6 foot paver area following these specifications. This area will be used to determine surcharge of the bedding material layer, joint sizes, lines, laying patterns and colors of the job. This area will be adjacent to an edge treatment, incorporate into the work, and will be the standard from which the work will be judged.

Environmental Conditions

Cover stockpiled materials with waterproof covering to prevent exposure to rainfall. Do not install bedding materials or architectural pavers during heavy rains or over wet substrata.

Installation

Install the architectural pavers in the following manner:

- A. Spread the bedding material evenly over the base course and screed to plan thickness, not to exceed a thickness of 1 1/2 inch. Do not disturb the screeded bedding material. Ensure placement of sufficient bedding material to stay ahead of the laid architectural pavers. Do not use the bedding material to fill depressions in the base course.
- B. Lay architectural pavers (i.e. pattern) as per engineer.
- C. Joints between the architectural pavers, on average, will be between 1/16 to 3/16 inch wide.
- D. Fill gaps at the edges of the paved area with cut or edge architectural pavers.
- E. When utilizing bedding and joint sand:
 1. Use a low amplitude vibrator capable of 5,000 foot-pounds with 7-100 Hz frequencies to vibrate and compact architectural pavers into bedding sand.
 2. Vibrate the architectural pavers, sweeping dry joint sand into the joints and vibrating, until the joints are full. Do not vibrate within 3 feet of the unrestrained edges of the architectural pavers.
 3. At the end of each day, all work within 3 feet of laying face must be left fully



compacted, with sand-filled joints.

4. Sweep off the excess sand.
- F. Leave a final surface elevation of architectural pavers of 1/8 to 1/4 inch above adjacent drainage inlets, concrete collars or channels.
- G. Do not permit the final surface elevations of the pavers to deviate more than 3/8 inch under a 10 foot long straightedge, or more than 1/8 inch between adjacent pavers.

Method of Measurement

The quantity to be paid for will be the area in square yards for Architectural Pavers, measured in place, completed and accepted. Measurement will be as specified in 9-1.3.1. No deduction will be made for the area(s) occupied by ornamental trees left within and any other areas occupied by manholes, inlets, drainage structures or by public utility appurtenances within the normal area(s) of the architectural pavers.

Basis of Payment

Price and payment will be full compensation for all work specified in this Section and the quantity, determined as provided above including but not limited to, preconstruction requirements, all material required for installation, labor, equipment, and contractor's methods to ensure complete installation will be paid for at the contract unit price per square foot for Architectural Pavers.

Payment shall be made under: Concrete Pavers pay item.