

CONTRACT DOCUMENTS AND SPECIFICATIONS

for

2014 Annual Paving Project

Bid Proposal #64-14

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City of Portsmouth, New Hampshire

Prepared by:

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Engineering Division
Public Works Department

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2014 Annual Paving Project

INVITATION TO BID

Sealed bid proposals, **plainly marked, 2014 Annual Paving Project**, Bid Proposal #64-14 **on the outside of the mailing envelope as well as the sealed bid envelope**, addressed to the Finance/Purchasing Department, City Hall, 1 Junkins Avenue, Portsmouth, New Hampshire, 03801, will be accepted until **2:00 p.m. July 9, 2014**; at which time all bids will be publicly opened and read aloud.

This project consists of the pavement repair of several roads in Portsmouth, NH. Specifically, the work includes hot bituminous paving, cold planing, reclaiming, structure adjustment & replacement, fine grading, pavement striping, traffic signal detector loops and other ancillary tasks.

Specifications may be obtained from the City's web site: www.cityofportsmouth.com, by contacting the Finance/Purchasing Department on the third floor at the above address, or by calling the Purchasing Coordinator at 603-610-7227. Addenda to this bid document, if any, including written answers to questions, will be posted on the City of Portsmouth website at <http://www.cityofportsmouth.com/finance/purchasing.htm> under the project heading. Addenda and updates will NOT be sent directly to vendors. Questions may be addressed to the Purchasing Coordinator.

Work may begin on or after July 21, 2014. Streets are to be completed within 28 days once work on them is begun. All sections of the work shall be completed by October 31, 2014. Liquidated damages shall be assessed at \$100.00 per day.

Bidders must determine the quantities of work required and the conditions under which the work will be performed.

The City reserves the right, after bid opening and prior to award of the contract, to modify the amount of the work in the event that bids exceed budgeted amounts. The City of Portsmouth further reserves the right to reject any or all bids, to waive technical or legal deficiencies, to re-bid, and to accept any bid that it may deem to be in the best interest of the City.

Each Bidder shall furnish a bid security in the amount of ten percent (10%) of the bid. The Bid Security may be in the form of a certified check drawn upon a bank within the State of New Hampshire or a bid bond executed by a surety company authorized to do business in the State of New Hampshire, made payable to the City of Portsmouth, N.H.

Bidders must be pre-qualified by the New Hampshire Department of Transportation for paving work. Any Bid submitted by a Bidder not pre-qualified will be rejected as non-conforming. Any subcontractor working on the project will be pre-approved by the City prior to the start of construction.

The General Contractor will be permitted to subcontract portions of the work not to exceed an aggregate dollar value of 50% of the total contract bid amount in complete accordance with Section 108 of the State of New Hampshire Standard Specifications for Road and Bridge Construction.

INSTRUCTIONS TO BIDDERS

BIDDING REQUIREMENTS AND CONDITIONS

1. Special Notice to Bidders

Appended to these instructions is a complete set of bidding and general contract forms. These forms may be detached and executed for the submittal of bids. The plans, specifications, and other documents designated in the proposal form will be considered as part of the proposal, whether attached or not.

The bidders must submit a statement of bidder's qualifications, if requested, subsequent to bid opening but prior to award.

Addenda to this proposal, if any, including written answers to questions, will be posted on the City of Portsmouth website at <http://www.cityofportsmouth.com/finance/purchasing.htm> under the project heading. Addenda and updates will NOT be sent directly to firms. Contractors submitting a proposal should check the web site daily for addenda and updates after the release date. Firms should print out, sign and return addenda with the proposal. Failure to do so may result in disqualification

2. Interpretation of Quantities in Bid Schedules

The quantities appearing in the bid schedule are approximate only and are prepared for the comparison of bids. Payment to the contractor will be made only for actual work performed and accepted in accordance with the contract. Any scheduled item of work to be done and materials to be furnished may be increased, decreased or omitted as hereinafter provided, and no claim for loss, anticipated profits or costs incurred in anticipation of work not ultimately performed will be allowed due to such increase or decrease.

3. Examination of Plans, Specifications and Site Work

The bidder is expected to examine carefully the site of the proposed work, the plans, standard specifications, supplemental specifications, special provisions and contract forms before submitting a proposal. The submission of a bid shall be considered conclusive evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the contract. It will be conclusive evidence that the bidder has also investigated and is satisfied with the sources of supply for all materials.

Plans, surveys, measurements, dimensions, calculations, estimates and statements as to the condition under which the work is to be performed are believed to be correct, but the contractors must examine for themselves, as no allowance will be made for any errors or inaccuracies that maybe found therein.

4. Familiarity with Laws

The bidder is assumed to have made himself or herself familiar with all federal and state laws and all local by-laws, ordinances and regulations which in any manner affect those engaged or employed on the work or affect the materials or equipment used in the work or affect the conduct of the work, and the bidder, if awarded the contract, shall be obligated to perform the work in conformity with said laws, by-laws, ordinances and regulations notwithstanding its ignorance thereof. If the bidder shall discover any provision in the plans or specifications which is in conflict with any such law, by-law, ordinance or regulation the bidder shall forthwith report it to the engineer in writing.

5. Preparation of Proposal

a) The bidder shall submit its proposal upon the forms furnished by the Owner. The bidder shall specify a lump sum price in figures, for each pay item for which a quantity is given and shall also show the products of the respective prices and quantities written in figures in the column provided for that purpose and the total amount of the proposal obtained by adding the amount of the several items. All words and figures shall be in ink or typed.

If a unit price or a lump sum bid already entered by the bidder on the proposal form is to be altered it should be crossed out with ink, the new unit price or lump sum bid entered above or below it and initialed by the bidder, also with ink.

b) The bidder's proposal must be signed with ink by the individual, by one or more general partners of a partnership, by one or more members or officers of each firm representing a joint venture; by one or more officers of a corporation, by one or more members (if member-managed) or managers (if manager-managed) of a limited liability company, or by an agent of the contractor legally qualified and acceptable to the owner. If the proposal is made by an individual, his or her name and post office address must be shown, by a partnership the name and post office address of each general and limited partner must be shown; as a joint venture, the name and post office address of each venturer must be shown; by a corporation, the name of the corporation and its business address must be shown, together with the name of the state in which it is incorporated, and the names, titles and business addresses of the president, secretary and treasurer.

6. Nonconforming Proposals

Proposals will be considered nonconforming and may be rejected in the Owner's sole discretion for any of the following reasons:

- If the proposal is on a form other than that furnished by the Owner, or if the form is altered or any portion thereof is detached;
- If there are unauthorized additions, conditional or altered bids, or irregularities of any kind which may tend to make the proposal or any portion thereof incomplete, indefinite or ambiguous as to its meaning;
- If the bidder adds any provisions reserving the right to accept or reject an award, or to enter into a contract pursuant to an award; or
- If the proposal does not contain a unit price for each pay item listed except in the case of authorized alter pay items.

7. Proposal Guaranty

No proposal will be considered unless accompanied by a bid bond, surety, or similar guaranty of the types and in an amount not less than the amount indicated in the Invitation to Bid. All sureties shall be made payable to the "City of Portsmouth". If a bid bond is used by the bidder it shall be:

- In a form satisfactory to the Owner;
- With a surety company licensed, authorized to do business in, and subject to the jurisdiction of the courts of the State of New Hampshire; and
- Conditioned upon the faithful performance by the principal of the agreements contained in the sub-bid or the general bid.

In the event any irregularities are contained in the proposal guaranty, the bidder will have four business days (not counting the day of opening) to correct any irregularities. The corrected guaranty must be received by 4:00 p.m. If irregularities are not corrected to the satisfaction of the Owner, the Owner, in its sole discretion, may reject the bid.

8. Delivery of Proposals

When sent by mail, the sealed proposal shall be addressed to the Owner at the address and in the care of the official in whose office the bids are to be received. All proposals shall be filed prior to the time and at the place specified in the invitation for bids. Proposals received after the time for opening of the bids will be returned to the bidder, unopened.

9. Withdrawal of Proposals

A bidder will be permitted to withdraw his or her proposal unopened after it has been submitted if the Owner receives a request for withdrawal in writing prior to the time specified for opening the proposals.

10. Public Opening of Proposals

Proposals will be opened and read publicly at the time and place indicated in the invitation for bids. Bidders, their authorized agents, and other interested parties are invited to be present.

11. Disqualification of Bidders

Any or all of the following reasons may be deemed by Owner in its sole discretion as being sufficient for the disqualification of a bidder and the rejection of his proposal:

- More than one proposal for the same work from an individual, firm, or corporation under the same or different name;
- Evidence of collusion among bidders;
- Failure to submit all required information requested in the bid specifications;
- If the Contractor is not listed with the New Hampshire Department of Transportation as a pre-qualified contractor under the classification of Paving;
- Lack of competency or of adequate machinery, plant or other equipment, as revealed by the statement of bidders qualification or otherwise;
- Uncompleted work which, in the judgment of the owner, might hinder or prevent the prompt completion of additional work if awarded;
- Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts;
- Default or unsatisfactory performance on previous contracts; or
- Such disqualification would be in the best interests of the Owner.

12. Material Guaranty and Samples

Before any contract is awarded, the bidder may be required to furnish a complete statement of the origin, composition and manufacture of any or all materials to be used in the construction of the work, and the Owner may, in its sole discretion, reject the bid based on the contents of the statement or as a result of the failure of the bidder to submit the statement.

AWARD AND EXECUTION OF CONTRACT

1. Consideration of Proposals

a) After the proposals are opened and read, they will be compared on the basis of the total price for all sections of work to be charged to perform the work and any such additional considerations as may be identified in the bid documents. The results of such comparisons will be immediately available to the public. In case of a discrepancy between the prices written in words and those written figures, the prices written in words shall govern. In case of a discrepancy between the total shown in the proposal and that obtained by adding the products of the quantities of items and unit bid prices, the latter shall govern.

b) The Owner reserves the right to reject any or all proposals, to waive technicalities or to advertise for new proposals, if, in the sole discretion of the Owner, the best interest of the City of Portsmouth will be promoted thereby.

2. Award of Contract

Within 30 calendar days after the opening of proposals, if a contract is to be awarded, the award will be made to the lowest responsible and qualified bidder whose proposal complies with all the requirements prescribed. The successful bidder will be notified, in writing, mailed to the address on his or her proposal, that his or her bid has been accepted and that the bidder has been awarded the contract.

The award shall not be considered official until such time that a Purchase Order, fully executed contract or an award letter has been issued by the Finance Director. No presumption of award shall be made by the bidder until such documents are in hand. Verbal notification of award is not considered official. Any action by the bidder to assume otherwise is done so at his/her own risk and the City will not be held liable for any expense incurred by a bidder that has not received an official award.

Determination of the lowest bidder will be based on the total price for the work described on the bid proposal form. Due to fluctuating prices and possible budget limitations, the City reserves the right to delete portions of the work prior to contract execution.

3. Cancellation of Award

The Owner reserves the right to cancel the award of any contract at any time before the execution of such contract by all parties without any liability of the Owner.

4. Return of Proposal Guaranty

All proposal guaranties, except those of the three lowest bidders, will be returned upon request following the opening and checking of the proposals. The proposal guaranties of the three lowest bidders will be returned within ten days following the award of the contract if requested.

5. Contract Bond

At the time of the execution of the contract, the successful bidder shall furnish:

- Labor and materials payment bond in the sum equal to 100 percent of the contract amount.

At the time of project completion, the Owner may, in its sole discretion, permit the Contractor to substitute a maintenance bond in lieu of holding retainage for the entire guaranty period. If a bond is furnished it shall meet the following criteria:

- The bond shall be in an amount equal to 20 percent of the contract amount. Such bond shall guarantee the repair of all damage due to faulty materials or workmanship provided or done by the contractor. The guarantee shall remain in effect for a period of one year after the date of final acceptance of the job by the Owner.

Each bond shall be: (1) in a form satisfactory to the Owner; (2) with a surety company licensed and authorized to do business and with a resident agent designated for services of process in the State of New Hampshire; and (3) conditioned upon the faithful performance by the principal of the agreements contained in the original bid. All premiums for the contract bonds are to be paid by the contractor.

6. Execution and Approval of Contract

The successful bidder is required to present all contract bonds, to provide proof of insurance, and to execute the contract within 10 days following receipt of the City's notification of acceptance of the bid. No contract shall be considered as in effect until it has been fully executed by all parties.

7. Failure to Execute Contract

Failure to execute the contract and file an acceptable bond within 10 days after notification of acceptance of bid shall be just cause for the cancellation of the award and the forfeiture of the proposal guarantee which shall become the property of the Owner, not as a penalty, but in liquidation of damages sustained. Award may then be made to the next lowest responsible bidder, or the work may be re-advertised as the Owner may determine in its sole discretion.

PROPOSAL FORM

2014 Annual Paving Project

CITY OF PORTSMOUTH, N.H.

To the City of Portsmouth, New Hampshire, herein called the Owner.

The undersigned, as Bidder, herein referred to as singular and masculine declares as follows:

1. All interested in the Bid as Principals are named herein;
2. This bid is not made jointly, or in conjunction, cooperation or collusion with any other person, firm, corporation, or other legal entity;
3. No officer, agent or employee of the Owner is directly or indirectly interested in this Bid;
4. The bidder has carefully examined the sites of the proposed work and fully informed and satisfied himself as to the conditions there existing, the character and requirements of the proposed work, the difficulties attendant upon its execution and the accuracy of all estimated quantities stated in this Bid, and the bidder has carefully read and examined the Drawings, Agreement, Specifications and other Contract Documents therein referred to and knows and understands the terms and provisions thereof;
5. The bidder understands that the quantities of work calculated in the Bid or indicated on the Drawings or in the Specifications or other Contract Documents are approximate and are subject to increase or decrease or deletion as deemed necessary by the Portsmouth City Engineer. Any such changes will not result in or be justification for any penalty or increase in contract prices; and agrees that, if the Bid is accepted the bidder will contract with the Owner, as provided in the Contract Documents, this Bid Form being part of said Contract Documents, and that the bidder will supply or perform all labor, services, plant, machinery, apparatus, appliances, tools, supplies and all other activities required by the Contract Documents in the manner and within the time therein set forth, and that the bidder will take in full payment therefor the following item prices; and
6. It is the intention of this contract that the items listed above describe completely and thoroughly the entirety of the work as shown on the plans and as described in the specifications. All other items required to accomplish the above items are considered to be subsidiary work, unless shown as a pay item.

SEE SPREADSHEET IN BACK OF DOCUMENT FOR SPECIFIC LOCATION OF ITEMS

ITEM #	EST. QTY.	UNITS	ITEM DESCRIPTION	UNIT PRICE IN FIGURES	ITEM TOTAL IN FIGURES
203.1	1434	Cy	Excavation of Excess Reclaim	_____	_____
203.3	1	Ls	Removal of Planters & Sidewalks in Worth Parking Lot As shown on plan	_____	_____
214	15423	SY	Fine Grading	_____	_____
304.32	200	CY	Shoulder Gravel	_____	_____
306.208	15423	SY	8" Reclaim Stab. Base	_____	_____
306.36	60	Tons	Stone for Reclaim Stab. Base (if needed)	_____	_____
403.11	4347	Ton	Machine Pave (50GYR)	_____	_____
403.12	60	Ton	Hand Method Pave (50GYR)	_____	_____
403.98	650	Ton	Hot Bituminous Leveling Course	_____	_____
410	48,471	SY	Emulsified Tack Coat	_____	_____
411.43	1640	Ton	3/8" Plant Mix Surface Treatment	_____	_____
417	4200	SY	Cold Plane	_____	_____
417A	500	SY	Cold Plane (Butt Joints)	_____	_____
603	40	Lf	Drainage Pipe	_____	_____
604.0007	12	EA	Polyethylene liner	_____	_____
604.22	2	EA	Drop Inlet Catch Basin	_____	_____
604.45	21	EA	Adjust CB or MH Cover	_____	_____
604.72	1	EA	Replace and Adjust CB F & G	_____	_____
608.24	1700	SF	4" Concrete Sidewalk or Island Infill	_____	_____
608.26	10	SF	6" Concrete Sidewalk (Token)	_____	_____
608.52	1	Ea	Handicapped Sidewalk Panel (Token)	_____	_____
609.01	470	Lf	5" Straight Granite Curbing	_____	_____
609.02	14	Lf	5" Curved Granite Curbing	_____	_____
609.21	10	LF	Granite Sloped Curbing	_____	_____
609.5	200	LF	Reset curbing as necessary	_____	_____

PROPOSAL FORM (continued)

611.90001	10	EA	Adjust Gate Valves	_____	_____
614.7214	260	LF	2" Schedule 40 Lighting Conduit	_____	_____
616	1	LS	Electrical Work for Worth Lot	_____	_____
616.551	1	EA	Worth Lot Electrical Cabinet Foundation	_____	_____
616.650	3	EA	6' x 50' Traffic Signal Loop	_____	_____
618.6	120	HR	Portsmouth Police (Traffic Control)	<u>\$51.25</u>	<u>\$6,150.00</u>
618.7	400	HR	Flaggers	<u>\$18.00</u>	<u>\$7,200.00</u>
619	1	U	Maintenance of Traffic	_____	_____
625	4	Ea	Light Pole Bases	_____	_____
625.52	4	Ea	Light Pole with Luminaire	_____	_____
626	3	Ea	Reset Electronic Parking Meter on New Foundation	_____	_____
632.0104	30200	LF	4" Painted Lane Striping	_____	_____
632.0104A	3000	LF	4" Painted Lane Striping (Parking Lot)	_____	_____
632.02	6	EA	Painted HC Symbol on Blue Background	_____	_____
632.22	1	EA	Preformed Thermoplastic Bike symbol (token)	_____	_____
632.3112	300	LF	12" Thermoplastic Striping (crosswalks)	_____	_____
632.3124	65	LF	24" Thermoplastic Striping (Stop Bars)	_____	_____
632.32	350	SF	Thermoplastic Words & Symbols	_____	_____
641	35	CY	Loam and Seed	_____	_____
661.1	10	Ea	Install Bollards for Meter Devices	_____	_____
661.4	6	Ea	Install City supplied Bick Racks	_____	_____
692	1	U	Mobilization	_____	_____
1010.2	1	\$	Asphalt Cement Adjustment	<u>\$5,000.00</u>	<u>\$5,000.00</u>

TOTAL FOR PROJECT AND BASIS OF AWARD

Total in Figures \$ _____

In Words \$ _____

The City reserves the right to delete any portion of the work/reduce the quantities of work represented in this bid proposal form.

The undersigned agrees that for extra work, if any, performed in accordance with the terms and provisions of the Contract Documents, the bidder will accept compensation as stipulated therein.

Date

Company

By: _____
Signature

Business Address

Title: _____

City, State, Zip Code

Telephone: _____

The Bidder has received and acknowledged Addenda No. _____ through _____.

All Bids are to be submitted on this form and in a sealed envelope, plainly marked on the outside with the Bidder's name and address and the Project name as it appears at the top of the Proposal Form.

We certify that the Company is currently pre-qualified with the State of New Hampshire for Paving Work.

By: _____
Signature

In order to follow the City's sustainability practices, future bid invitations/specifications may be sent electronically. Please provide an email address as to where I could email future bid invitations/specifications of this type. Thank you in advance for your cooperation.

Email
Address: _____

BID SECURITY BOND

(This format provided for convenience, actual Bid Bond is acceptable in lieu of, if compatible.)

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned

_____, as Principal, and

_____, as Surety, are hereby

held and firmly bound unto _____

IN THE SUM OF _____

as liquidated damages for payment of which, well and truly to be made we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

The condition of this obligation is such that whereas the Principal has submitted to the

_____ A CERTAIN Bid attached hereto and hereby made a part hereof to enter into a contract in writing, hereinafter referred to as the "AGREEMENT" and or "CONTRACT", for

NOW THEREFORE,

- (a) If said Bid shall be rejected or withdrawn as provided in the INFORMATION FOR BIDDERS attached hereto or, in the alternative,

- (b) If said Bid shall be accepted and the Principal shall duly execute and deliver the form of AGREEMENT attached hereto and shall furnish the specified bonds for the faithful performance of the AGREEMENT and/or CONTRACT and for the payment for labor and materials furnished for the performance of the AGREEMENT and or CONTRACT,

then this obligation shall be void , otherwise it shall remain in full force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder in no event shall exceed the amount of this obligation.

BID SECURITY BOND (continued)

The Surety, for value received, hereby agrees that the obligation of said surety and its bond shall be in no way impaired or affected by any extensions of the time within such BID may be accepted, and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the parties hereto have duly executed

this bond on the _____ day of _____, 20__.

_____ L.S.
(Name of Principal)

(SEAL)

BY _____

(Name of Surety)

BY _____

STATEMENT OF BIDDER'S QUALIFICATIONS

Note: This is a required submittal, fill out completely.

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. Add separate sheets if necessary

1. Name of Bidder
2. Permanent Main Office Address
3. Form of Entity
4. When Organized
5. Where Organized
6. How many years have you been engaged in the contracting business under your present name; also state names and dates of previous firm names, if any.
7. Contracts on hand; (schedule these, showing gross amount of each contract and the approximate anticipated dates of completion).
8. General character of work performed by your company.
9. Have you ever failed to complete any work awarded to you? ____ (no) ____ (yes). If so, where and why?
10. Have you ever defaulted on a contract?
____ (no) ____ (yes). If so, where and why?
11. Have you ever failed to complete a project in the time allotment according to the Contract Documents?
____ (no) ____ (yes). If so, where and why?
12. List the most important contracts recently executed by your company, stating approximate cost for each, and the month and year completed.
13. List your major equipment available for this contract.
14. List your key personnel such as project superintendent and foremen available for this contract.

STATEMENT OF BIDDERS QUALIFICATIONS (continued)

15. List any subcontractors whom you will use for the following (unless this work is to be done by your own organization, if so please state).
- a. Hand Paving _____
 - b. Adjusting Structures _____
 - c. Pavement Markings _____
 - d. Curbing _____
 - e. Traffic Signals & Electrical Work _____

(The City reserves the right to approve subcontractors for this project)

16. With what banks do you do business?

a. Do you grant the Owner permission to contact this/these institutions?
____(yes) ____ (no).

b. Latest Financial Statements, certified audited if available, prepared by an independent certified public accountant, may be requested by Owner. If requested, such statements must be provided within five (5) business days or the bid proposal will be rejected. Certified Audited Statement are preferred. Internal statements may be attached only if independent statements were not prepared.

Dated at _____ this _____ day of _____, 20__.

Name of Bidder

BY _____

TITLE _____

State of _____

County of _____

_____ being duly sworn, deposes and

says that the bidder is _____ of _____
(Name of Organization)

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

Sworn to before me this ____ day of _____, 20__.

Notary of Public

My Commission expires _____

CONTRACT AGREEMENT

2014 Annual Paving Project

THIS AGREEMENT made as of the xxxxxxx of xxxx in the year **2014**, by and between the City of Portsmouth, New Hampshire (hereinafter call the Owner) and xxxxxxxxxxxxxxxx. (hereinafter called the Contractor),

WITNESSETH; that the Owner and Contractor, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE I- Work - The Contractor shall perform all work as specified or indicated in the Contract Documents for the pavement repair of several roads in Portsmouth (roads to be designated by owner). The Contractor shall provide, at his expense, all labor, materials, equipment and incidentals as may be necessary for the expeditious and proper execution of the Project.

ARTICLE II - ENGINEER - The Director of Public Works or his authorized representative will act as City Engineer in connection with completion of the Project in accordance with the Contract Documents.

ARTICLE III - CONTRACT TIME - The work shall commence in accordance with the Notice to Proceed. Work on streets shall be completed on that single street within 28 days of commencing work on that street.

All Work shall be completed prior to October 31, 2014.

ARTICLE IV - CONTRACT PRICE - Owner shall pay Contractor for pavement repair for only those roads designated for repair by Owner. Owner makes no representation that it will undertake all the pavement repairs estimated in the bid proposal form. Contractor will be paid only for work performed in accordance with the Contract Documents as shown under item prices in the Bid Proposal.

ARTICLE V - PAYMENT - Partial payments will be made in accordance with the Contract Documents. Upon final acceptance of the work and settlement of all claims, Owner shall pay the Contractor the unpaid balance of the Contract Price, subject to additions and deductions provided for in the Contract Documents.

ARTICLE VI - RETAINAGE - To insure the proper performance of this Contract, the Owner shall retain certain amounts in the percentage of the Contract Price and for the time specified as provided in the Contract Documents.

ARTICLE VII - LIQUIDATED DAMAGES - In event the Contractor fails to successfully execute the work within the specified contract time the Owner shall assess the Contractor liquidated damages in the amount of **one hundred dollars (\$100)** for each calendar day beyond the specified completion date for each section of work. Liquidated damages shall be deducted from the Contract Price prior to final payment of the Contractor.

CONTRACT AGREEMENT (continued)

ARTICLE VIII – CONTRACT DOCUMENTS – The Contract Documents which comprise the contract between Owner and Contractor are attached hereto and made a part hereof and consist of the following:

- 8.1 This Agreement
- 8.2 Contractor’s Bid and Bonds
- 8.3 Notice of Award, Notice to Proceed
- 8.4 Instruction to Bidders
- 8.5 General Requirements, Control of Work, Temporary Facilities, Measurement and Payment, Standard Specifications
- 8.6 Insurance Requirements
- 8.7 Standard and Technical Specifications
- 8.8 Drawings
- 8.9 Special Provisions
- 8.10 Storm water Pollution Prevention Plan
- 8.11 Any modifications, including change orders, duly delivered after execution of this Agreement.

ARTICLE IX – TERMINATION FOR DEFAULT – Should contractor at any time refuse, neglect, or otherwise fail to supply a sufficient number or amount of properly skilled workers, materials, or equipment, or fail in any respect to prosecute the work with promptness and diligence, or fail to perform any of its obligations set forth in the Contract, Owner may, at its election, terminate the employment of Contractor, giving notice to Contractor in writing of such election, and enter on the premises and take possession, for the purpose of completing the work included under this Agreement, of all the materials, tools and appliances belonging to Contractor, and to employ any other persons to finish the work and to provide the materials therefore at the expense of the Contractor.

ARTICLE X – INDEMNIFICATION OF OWNER – Contractor shall defend, indemnify and hold harmless Owner and its officials and employees from and against all suits, claims, judgments, awards, losses, costs or expenses (including without limitation attorneys’ fees) to the extent arising out of or relating to Contractor’s alleged negligence or breach of its obligations or warranties under this Contract. Contractor shall defend all such actions with counsel satisfactory to Owner at its own expense, including attorney’s fees, and will satisfy any judgment rendered against Owner in such action.

ARTICLE XI – PERMITS – The Contractor shall secure at its own expense, all permits and consents required by law as necessary to perform the work and shall give all notices and pay all fees and otherwise comply with all applicable City, State, and Federal laws, ordinances, rules and regulations.

ARTICLE XII – INSURANCE – The Contractor shall secure and maintain, until acceptance of the work, insurance with limits not less than those specified in the Contract.

ARTICLE XIII – MISCELLANEOUS –

- A. Neither Owner nor Contractor shall, without the prior written consent of the other, assign, sublet or delegate, in whole or in part, any of its rights or obligations under any of the Contract Documents; and, specifically not assign any monies due, or to become due, without the prior written consent of Owner.
- B. Owner and Contractor each binds himself, his partners, successors, assigns and legal representatives, to the other party hereto in respect to all covenants, agreements and obligations contained in the Contract Documents.

- C. The Contract Documents constitute the entire Agreement between Owner and Contractor and may only be altered amended or repealed by a duly executed written instrument.
- D. The laws of the State of New Hampshire shall govern this Contract without reference to the conflict of law principles thereof.
- E. Venue for any dispute shall be the Rockingham County Superior Court unless the parties otherwise agree.

IN WITNESS WHEREOF, the parties hereunto executed this
AGREEMENT the day and year first above written.

BIDDER:

BY: _____

TITLE: _____

CITY OF PORTSMOUTH, N.H.

BY: _____
John P. Bohenko

TITLE: City Manager

NOTICE OF INTENT TO AWARD

Date:

TO:

IN AS MUCH as you were the low responsible bidder for work entitled:

2014 Annual Paving Project

You are hereby notified that the City intends to award the aforesaid project to you.

Immediately take the necessary steps to execute the Contract and to provide required bonds and proof of insurance within fifteen (15) calendar days from the date of this Notice.

The City reserves the right to revoke this Notice if you fail to take the necessary steps to execute this Contract.

City of Portsmouth
Portsmouth, New Hampshire

Judie Belanger,
Finance Director

NOTICE TO PROCEED

DATE: xxxxxxx

PROJECT: **2014 Annual Paving**

TO:

YOU ARE HEREBY NOTIFIED TO COMMENCE WORK IN ACCORDANCE

WITH THE AGREEMENT DATED, ON xxxxxxxxxxxxxxx

ALL WORK SHALL BE COMPLETED PRIOR TO October 31, 2014.

CITY OF PORTSMOUTH, N.H.

BY: Peter H. Rice, PE

TITLE: Public Works Director

ACCEPTANCE OF NOTICE

RECEIPT OF THE ABOVE NOTICE TO
PROCEED IS HEREBY ACKNOWLEDGED BY

This the _____ day of _____ 20__

By: _____

Title: _____

CHANGE ORDER

Change Order # _____

Date of Issuance: _____

Owner: CITY OF PORTSMOUTH, N.H

Contractor: _____

You are directed to make the following changes in the Contract Documents:

Description:

Purpose of Change Order:

Attachments: _____

CHANGE IN CONTRACT PRICE

CHANGE IN CONTRACT TIME

Original Contract Price:
\$ _____

Original Completion Date:
October 31, 2014

Contract Price prior to this
Change Order:
\$ _____

Contract Time prior to this
Change Order:

Net Increase of
this Change Order:
\$ _____

Net Increase or Decrease of
this Change Order:

Contract Price with all
approved Change Orders:
\$ _____

Contract Time with all
approved Change Orders:

RECOMMENDED:

APPROVED:

APPROVED:

by _____ by _____ by _____ by _____

PW Director

City Finance

City Manager

Contractor

LABOR AND MATERIAL PAYMENT BOND

(This format provided for convenience, actual Labor and Material Bond is acceptable in lieu, if compatible)

Bond Number _____

KNOW ALL MEN BY THESE PRESENTS:

that _____

as Principal, hereinafter called Contractor, and _____ (Surety Company) a corporation organized and existing under the laws of the State of

_____ and authorized to do business in the State of New Hampshire hereinafter called Surety, are held and firmly bound unto the City of Portsmouth, N.H. Obligee, hereinafter called Owner, for the use and benefit of claimants as herein below defined, in the

amount of _____ Dollars (\$_____), for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated _____ entered into a

contract with Owner for _____ in accordance with drawings and specifications prepared by the Public Works Department, 680 Peverly Hill Road, Portsmouth, N.H. 03801, which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that the Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract and for the hire of all equipment, tools, and all other things contracted for or used in connection therewith, then this obligation shall be void, otherwise it shall remain in full force and effect, subject however, to the following conditions:

(1) A claimant is defined as one having a direct contract with the Principal or, with a subcontractor of the Principal for labor, material, equipment, or other things used or reasonably required for use in the performance of the Contract. "Labor and material" shall include but not be limited to that part of water, gas, power, light, heat, oil and gasoline, telephone service or rental of equipment applicable to the Contract.

(2) The above named Principal and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such a claimant, may sue on this bond for the use of such claimant, prosecute the suit by final judgment for such sum or sums as may be

LABOR AND MATERIAL PAYMENT BOND (continued)

justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any such suit or any costs or expenses of any such suit, and principal and surety shall jointly and severally indemnify, defend and hold the Owner harmless for any such suit, costs or expenses.

(3) No suit or action shall be commenced hereunder by any claimant:

(a) Unless Claimant, other than one having a direct contract with the Principal, shall have given notice to all the following:

The Principal, the Owner and the Surety above named, within six (6) calendar months after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, Owner, and Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the State of New Hampshire save that such service need not be made by a public officer.

(b) After the expiration of one (1) year following the date on which Principal ceased all work on said contract, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

(c) Other than in a State court of competent jurisdiction in and for the county or other political subdivision of the State in which the project, or any part thereof, is situated, or in the United States District Court for the district in which the project, or any part thereof, is situated, and not elsewhere. (4) The amount of this bond may be reduced by and to the extent of any payment of payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed on record against said improvement, whether or not claim for the amount of such lien by presented under and against this bond.

Signed and sealed this _____ day of _____, 20____. In the presence of:

_____ BY: _____
(Witness) (Principal) (Seal)

(Surety Company)

_____ BY: _____
(Witness) (Title) (Seal)

LABOR AND MATERIAL PAYMENT BOND (continued)

Note:

If the Principal (Contractor) is a partnership, the Bond should be signed by each of the partners.

If the Principal (Contractor) is a corporation, the Bond should be signed in its correct corporate name by its duly authorized Officer or Officers.

If this bond is signed on behalf of the Surety by an attorney-in-fact, there should be attached to it a duly certified copy of his Power of Attorney showing his authority to sign such Bonds.

There should be executed an appropriate number of counterparts of the bond corresponding to the number of counterparts of the Agreement.

MAINTENANCE BOND

At the Owner's election, a maintenance bond may be substituted for retainage at the completion of the project. If the Owner permits a maintenance bond, it shall be in the amount of **Twenty Percent (20%)** of the contract price with a corporate surety approved by the Owner. Such bond shall be provided at the time of Contract completion and shall guarantee the repair of all damage due to faulty materials or workmanship provided or done by the Contractor. This guarantee shall remain in effect for a period of one year after the date of final acceptance of the job by the Owner.

CONTRACTOR'S AFFIDAVIT

STATE OF _____:

COUNTY OF _____:

Before me, the undersigned, a _____
(Notary Public, Justice of the Peace)

in and for said County and State personally appeared, _____
(Individual, Partner, or duly authorized representative of Corporate)

who, being duly sworn, according to law deposes and says that the cost of labor, material, and equipment and outstanding claims and indebtedness of whatever nature arising out of the performance of the Contract between

CITY OF PORTSMOUTH, NEW HAMPSHIRE

and _____
(Contractor)

of _____

Dated: _____

has been paid in full for Construction of: **2014 Annual Paving Project**

(Individual, Partner, or
duly authorized
representative of
Corporate Contractor)

Sworn to and subscribed
before me this _____ day
of _____ 20____

CONTRACTOR'S RELEASE

KNOW ALL MEN BY THESE PRESENTS that _____

(Contractor) of _____, County of _____ and State of

_____ does hereby acknowledge

that _____ (Contractor)

has on this day had, and received from the CITY OF PORTSMOUTH NEW HAMPSHIRE, final and completed payment for the Construction of:

2014 Annual Paving Project

NOW THEREFORE, the said _____

(Contractor)

for myself, my heirs, executors, and administrators) (for itself, its successors and assigns) do/does by these presents remise, release, quit-claim and forever discharge the City of Portsmouth, New Hampshire, its successors and assigns, of and from all claims and demands arising from or in connection with the said Contract dated _____, and of and from all, and all manners of action and actions, cause and causes of action and actions, suits, debts, dues, duties, sum and sums of money, accounts, reckonings, bonds, bills, specifications, covenants, contracts, agreements, promises, variances, damages, judgments, extents, executions, claims and demand, whatsoever in law of equity, or otherwise, against the City of Portsmouth, New Hampshire, its successors and assigns, which (I, my heirs, executors, or administrators) (it, its successors and assigns) ever had, now have or which (I, my heirs, executors, or administrators) (it, its successors and assigns) hereafter can shall or may have, for, upon or by reason of any matter, cause, or thing whatsoever; from the beginning of record time to the date of these presents.

IN WITNESS WHEREOF,

Contractor:

print name of witness: _____

By: _____
Its Duly Authorized _____

Dated: _____

GENERAL REQUIREMENTS

SCOPE OF WORK

1. INTENT OF CONTRACT

The intent of the Contract is to provide for the construction and completion in every detail of the work described. The Contractor shall furnish all labor, materials, equipment, tools, transportation and supplies required to complete the work in accordance with the terms of the Contract. The Contractor shall be required to conform to the intent of the plans and specifications. No extra claims shall be allowed for portions of the work not specifically addressed in the plans and specifications but required to produce a whole and complete project, such work will be considered subsidiary to the bid items.

2. INCIDENTAL WORK

Incidental work items for which separate payment is not measured includes, but is not limited to, the following items:

- a. Clearing, grubbing and stripping (unless otherwise paid for)
- b. Clean up
- c. Plugging existing sewers and manholes
- d. Signs
- e. Mobilization/Demobilization (unless otherwise paid for)
- f. Restoration of property
- g. Cooperation with other contractors, abutters and utilities.
- h. Utility crossings, (unless otherwise paid for)
- i. Minor items - such as replacement of fences, guardrails, rock wall, etc.
- j. Steel and/or wood sheeting as required.
- k. Accessories and fasteners or components required to make items paid for under unit prices or lump sum items complete and functional.

3. ALTERATION OF PLANS OR OF CHARACTER OF WORK

The Owner reserves the right, without notice to Surety, to make such alterations of the plans or of the character of the work as may be necessary or desirable to complete fully and acceptably the proposed construction; provided that such alterations do not increase or decrease the contract cost. Within these cost limits, the alterations authorized in writing by the Owner shall not impair or affect any provisions of the Contract or bond and such increases or decreases of the quantities as a result from these alterations or deletions of certain items, shall not be the basis of claim for loss or for anticipated profits by the contractor. The contractor shall perform the work as altered at the contract unit price or prices.

4. EXTRA WORK ITEMS

Extra work shall be performed by the Contractor in accordance with the specifications and as directed, and will be paid for at a price as provided in the Contract documents or if such pay items are not applicable than at a price negotiated between the contractor and the Owner or at the unit bid price. If the Owner determines that extra work is to be performed, a change order will be issued.

5. CHANGE ORDERS

The Owner reserves the right to issue a formal change order for any increase, decrease, deletion, or addition of work or any increase in contract time or price. The contractor shall be required to sign the change order and it shall be considered as part of the Contract documents.

6. FINAL CLEANING UP

Before acceptance of the work, the contractor shall remove from the site all machinery, equipment, surplus materials, rubbish, temporary buildings, barricades and signs. All parts of the work shall be left in a neat and presentable condition. On all areas used or occupied by the contractor, regardless of the contract limits, the bidder shall clean-up all sites and storage grounds.

The items prescribed herein will not be paid for separately, but shall be paid for as part of the total contract price.

7. ERRORS AND INCONSISTENCY IN CONTRACT DOCUMENTS

Any provisions in any of the Contract Documents that may be in conflict with the paragraphs in these General Requirements shall be subject to the following order of precedence for interpretation.

1. Technical Specifications will govern General Requirements.
2. Special Provisions will govern Technical Specifications.
3. Plans will govern Special Provisions, Technical Specifications, and General Requirements.

CONTROL OF WORK

1. AUTHORITY OF ENGINEER

(a) All work shall be done under supervision of the City Engineer and to his satisfaction. The City Engineer will decide all questions which may arise as to the quality and acceptability of materials furnished and work performed and as to the rate of progress of the work; all questions that may arise as to the interpretation of the plans and specifications; and all questions as to the acceptable fulfillment of the Contract by the Contractor.

(b) The City Engineer will have the authority to suspend the work wholly or in part for such periods as he may deem necessary due to the failure of the Contractor to correct conditions unsafe for workers or the general public; for failure to carry out provisions of the Contract; for failure to carry out orders; for conditions considered unsuitable for the prosecution of the work, including unfit weather; or for any other condition or reason deemed to be in the public interest. The Contractor shall not be entitled any additional payments arising out of any such suspensions.

(c) The Owner reserves the right to demand a certificate of compliance for a material or product used on the project. When the certificate of compliance is determined to be unacceptable to the City Engineer the Contractor may be required to provide engineering and testing services to guarantee that the material or product is suitable for use in the project, at its expense (see Sample of Certificate of Compliance).

2. PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPES

(a) The Contractor shall use every precaution to prevent injury or damage to wires, poles, or other property of public utilities; trees, shrubbery, crops, and fences along and adjacent to the right-of-way, all underground structures such as pipes and conduits, within or outside of the right-of-way; and the Contractor shall protect and carefully preserve all property marks until an authorized agent has witnessed or otherwise referenced their location.

(b) The Contractor shall be responsible for all damage or injury to property of any character, during the prosecution of the work, resulting from any act, omission, neglect, or misconduct in his manner or method of executing the work, or at any time due to defective work or materials, and said responsibility will not be released until the project shall have been completed and accepted.

(c) When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or as a result of the failure to perform work by the Contractor, the Contractor shall restore, at its own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing rebuilding, or otherwise restoring as may be directed, or the Contractor shall make good such damage or injury in an acceptable manner.

(d) The Contractor shall paint with tree paint all scars made on fruit or ornamental trees by equipment, construction operations, or the removal of limbs larger than one inch in diameter. Damaged trees must be replaced if so determined by the City Arborist, in his or her sole discretion.

(e) If the Contractor fails to repair, rebuild or otherwise restore such property as may be deemed necessary, the Owner, after 48 hours notice, may proceed to do so, and the cost thereof may be deducted from any money due or which may become due the Contractor under the contract.

(f) It is the intent of the Parties that the Contractor preserve, to as great an extent as possible, the natural features of the site.

(g) Manhole and/or catch basin castings, frames, covers, and grates shall be protected and preserved during construction. A careful inventory shall be kept regarding which frames and covers/grates were removed so they can be replaced in the proper location. Any damaged or missing frames, covers, or grates shall be replaced by the contractor at no cost to the owner.

CONTROL OF WORK (continued)

3. MAINTENANCE DURING CONSTRUCTION

The Contractor shall maintain the work during construction and until the project is accepted. This maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and workers to ensure that the structure is kept in satisfactory conditions at all times.

4. SAFETY PRECAUTIONS

Upon commencement of work, the Contractor shall be responsible for initiating, maintaining and supervising all safety precautions necessary to ensure the safety of employees on the site, other persons who may be affected thereby, including the public, and other property at the site or adjacent thereto.

5. PERMITS

It will be the responsibility of the Contractor to obtain all permits required for the operation of equipment in, or on, all city streets and public ways.

6. BARRICADES, WARNING SIGNS AND TRAFFIC OFFICERS

(a) The Contractor shall provide, erect and maintain all necessary barricades, suitable and sufficient lights, danger signals, signs and other traffic control devices, and shall take all necessary precautions for the protection of the work and safety of the public. Roadway closed to traffic shall be protected by effective barricades. Obstructions shall be illuminated during hours of darkness. Suitable warning signs shall be provided to control and direct traffic in a proper manner, as approved by the engineer.

(b) The Contractor will be held responsible for all damage to the work from traffic, pedestrians, animals or any other cause due to lack of adequate controlling devices.

(c) The Contractor shall provide such police officers as the City Engineer deems necessary for the direction and control of traffic within the site of project.

The work prescribed herein will not be paid for separately but will be paid for as part of the Contract Price unless specifically appearing as a bid item.

TEMPORARY FACILITIES

1. STORAGE FACILITIES

(a) The Contractor shall not store materials or equipment in a public right-of-way beyond the needs of one working day. Equipment and materials shall be stored in an approved location.

(b) The Contractor shall protect all stored materials from damage by weather or accident and shall insure adequate drainage at and about the storage location.

(c) Prior to final acceptance of the work all temporary storage facilities and surplus stored materials shall be removed from the site.

2. SANITARY FACILITIES

(a) The Contractor shall provide for toilet facilities for the use of the workers employed on the work.

(b) Temporary toilet facilities may be installed provided that the installation and maintenance conform with all State and local laws, codes, regulations and ordinances governing such work. They shall be properly lit and ventilated, and shall be kept clean at all times.

(c) Prior to final acceptance of the work all temporary toilet facilities shall be removed from the site.

3. TEMPORARY WATER

The Contractor shall make all arrangements with the local water department for obtaining water connections to provide the water necessary for construction operations and shall pay all costs.

4. TEMPORARY ELECTRICITY

The Contractor shall make all arrangements with the Public Service Company for obtaining electrical connections to provide the electrical power necessary for construction operations and security lighting and shall pay all electrical connection and power costs.

The Contractor shall be responsible with obtaining an electrical permit from the City Electrical Inspector.

INSURANCE REQUIREMENTS

Insurance shall be in such form as will protect the Contractor from all claims and liabilities for damages for bodily injury, including accidental death, and for property damage, which may arise from operations under this contract whether such operation by himself or by anyone directly or indirectly employed by him.

AMOUNT OF INSURANCE

- A) Comprehensive General Liability:
Bodily injury or Property Damage - \$2,000,000
Per occurrence and general aggregate
- B) Automobile and Truck Liability:
Bodily Injury or Property Damage - \$2,000,000
Per occurrence and general aggregate

Additionally, the Contractor shall purchase and maintain the following types of insurance:

- A) At least \$1,000,000 in Workers Comprehensive Insurance coverage for all people employed by the Contractor to perform work on this project.
- B) Contractual Liability Insurance coverage in the amounts specified above under Comprehensive General Liability.
- C) Product and Completed Operations coverage to be included in the amounts specified above under Comprehensive General Liability.

ADDITIONAL INSURED

All liability policies (including any excess policies used to meet coverage requirements) shall include the City of Portsmouth, New Hampshire as named Additional Insured.

- 1) The contractor's insurance shall be primary in the event of a loss.
- 2) The Additional Insured endorsement must include language specifically stating that the entity is to be covered for all activities performed by, or on behalf of, the contractor, including the City of Portsmouth's general supervision of the contractor.
- 3) City of Portsmouth shall be listed as a Certificate Holder and Additional Insured. The City shall be identified as follows:

City of Portsmouth
Attn: Legal Department
1 Junkins Avenue
Portsmouth, NH 03801

MEASUREMENT AND PAYMENT

1. MEASUREMENT OF QUANTITIES

- (a) All work completed under the contract will be measured according to the United States standard measure.
- (b) The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice. Unless otherwise stated all quantities measured for payment shall be computed or adjusted for "in place" conditions.
- (c) Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures having an area of 9 square feet or less. Unless otherwise specified, transverse measurements for area computations will be the dimensions shown on the plans or ordered in writing.
- (d) Structures will be measured according to lines shown on the plans or as ordered unless otherwise provided for elsewhere in the specifications.
- (e) In computing volumes of excavation, embankment, and borrow, the average end area method will be used. Where it is impracticable to measure by the cross-section method, acceptable methods involving three-dimensional measurement may be used. When measurement of borrow in vehicles is permitted, the quantity will be determined as 80 percent of the loose volume.
- (f) In computing volumes of concrete, stone and masonry, the prismatic method will be used. The term "ton" will mean the short ton consisting of 2,000 pounds avoirdupois.
- (g) Except as specified below, all materials that are measured or proportioned by weight shall be weighed on scales which the Contractor has had sealed by the State or by a repairman registered by the Commissioner of Agriculture. All weighing shall be performed in a manner prescribed under the Rules and Regulations of the Bureau of Weights and Measures of the New Hampshire Department of Agriculture.
- (h) Weighing of materials on scales located outside New Hampshire will be permitted for materials produced or stored outside the state, when requested by the Contractor and approved. Out-of-state weighing in order to be approved, must be performed by a licensed public weigh master or a person of equal authority in the state concerned on scales accepted in the concerned state.
- (i) Each truck used to haul material being paid for by weight shall bear a plainly legible identification mark, and if required, shall be weighed empty daily at such times as directed.
- (j) When material is weighed, the individual weight slips, which shall be furnished by the Contractor, for trucks, trailers, or distributors, shall show the following information: the date; the project; the material or commodity; the dealer or vendor; the Contractor or Subcontractor; the location of the scales; the vehicle registration number or other approved legible identification mark; the tare and net weights, with gross weights when applicable; and the weigher's signature or his signed initials.
- (k) The right is reserved to weight any truck, trailer, or distributor, at locations designated, before and after making deliveries to the project.
- (l) Bituminous materials will be measured by the gallon or ton.
- (m) When material is specified to be measured by the cubic yard but measurement by weight is approved, such material may be weighed and the weight converted to cubic yards for payment purposes. Necessary conversion factors will be determined by the Owner.
- (n) The term "lump sum" when used as an item of payment will mean complete payment for the work described in the item.

MEASUREMENT AND PAYMENT (continued)

(o) When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories, so as to provide the item complete and functional. Except as may be otherwise provided, partial payments for lump sum items will be made approximately in proportion to the amount of the work completed on those items.

(p) Material wasted without authority will not be included in the final estimate.

2. SCOPE OF PAYMENT

(a) The Contractor shall receive and accept compensation provided for in the contract as full payment for furnishing all materials and for performing all work under the contract in a complete and acceptable manner and for all risk, loss, damage or expense of whatever character arising out of the nature of the work or the prosecution thereof.

(b) The Contractor shall be liable to the Owner for failure to repair, correct, renew or replace, at his own expense, all damage due or attributable to defects or imperfections in the construction which defects or imperfections may be discovered before or at the time of the final inspection and acceptance of the work.

(c) No monies, payable under the contract or any part thereof, except the first estimate, shall become due or payable if the Owner so elects, until the Contractor shall satisfy the Owner that the Contractor has fully settled or paid all labor performed or furnished for all equipment hired, including trucks, for all materials used, and for fuels, lubricants, power tools, hardware and supplies purchased by the Contractor and used in carrying out said contract and for labor and parts furnished upon the order of said Contractor for the repair of equipment used in carrying out said contract; and the Owner, if he so elects, may pay any and all such bills, in whole or in part, and deduct the amount of amounts so paid from any partial or final estimate, excepting the first estimate.

3. COMPENSATION FOR ALTERED QUANTITIES

(a) Except as provided for under the particular contract item, when the accepted quantities of work vary from the quantities in the bid schedule the Contractor shall accept as payment in full, so far as contract items are concerned, at the original contract unit prices for the accepted quantities of work done. No allowance will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor resulting either directly from such alterations or indirectly from unbalanced allocation among the contract items of overhead expense on the part of the Bidder and subsequent loss of expected reimbursements therefore or from any other cause.

(b) Extra work performed will be paid for at the contract bid prices or at the price negotiated between the Owner and the Contractor if the item was not bid upon. If no agreement can be negotiated, the Contractor will accept as payment for extra work, cost plus 15% (overhead and profit). Costs shall be substantiated by invoices and certified payroll.

4. PARTIAL PAYMENTS

Partial payments will be made on a monthly basis during the contract period. From the total amount ascertained as payable, an amount equivalent to ten percent (10%) of the whole will be deducted and retained by the Owner until such time as the work receives final acceptance.

5. FINAL ACCEPTANCE

Upon due notice from the Contractor of presumptive completion of the entire project, the City Engineer will make an inspection. If all construction provided for and contemplated by the contract is found complete to his satisfaction, this inspection shall constitute the final inspection and the City Engineer will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of the final inspection.

MEASUREMENT AND PAYMENT (continued)

If, however, the inspection discloses any work in whole or in part, as being unsatisfactory, the City Engineer will give the Contractor the necessary instructions for correction of such work, and the Contractor shall immediately comply with and execute such instructions. Upon correction of the work, another inspection will be made which shall constitute the final inspection provided the work has been satisfactorily completed. In such event, the City Engineer will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of final inspection.

6. ACCEPTANCE AND FINAL PAYMENT

(a) When the project has been accepted and upon submission by the Contractor of all required reports, completed forms and certifications, the Owner will review the final estimate of the quantities of the various classes of work performed. The Contractor may be required to certify that all bills for labor and material used under this contract have been paid.

(b) The Contractor shall file with the Owner any claim that the Contractor may have regarding the final estimate at the same time the Contractor submits the final estimate. Failure to do so shall be a waiver of all such claims and shall be considered as acceptance of the final estimate. From the total amount ascertained as payable, an amount equal to ten percent (10%) of the whole will be deducted and retained by the Owner for the guaranty period. This retainage may be waived, at the discretion of the City, provided the required Maintenance Bond has been posted. After approval of the final estimate by the Owner, the Contractor will be paid the entire sum found to be due after deducting all previous payments and all amounts to be retained or deducted under the provisions of the contract.

(c) All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

7. GENERAL GUARANTY AND WARRANTY OF TITLE

(a) Neither the final certification of payment nor any provision in the contract nor partial or entire use of the improvements embraced in this Contract by the Owner or the public shall constitute an acceptance of work not done in accordance with the Contract or relieve the Contractor of liability in respect to any express or implied warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and pay for any damage to other work resulting therefrom which shall appear within a period of twelve (12) months from the date of final acceptance of the work. The Owner will give notice of defective materials and work with reasonable promptness.

(b) No material, supplies or equipment to be installed or furnished under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale, lease purchase or other agreement by which an interest therein or in any part thereof is retained by the Seller or supplier. The Contractor shall warrant good title to all materials, supplies and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed thereon by him to the Owner free from any claims, liens or charges. Neither the Contractor nor any person, firm or corporation furnishing any material or labor for any work covered by this Contract shall have the right to a lien upon any improvements or appurtenances thereon.

Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any bond given by the Contractor for their protection or any rights under any law permitting such persons to look to funds due the Contractor in the hands of the Owner. The provisions of this paragraph shall be inserted in all subcontractors and material contracts and notice of its provisions shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

MEASUREMENT AND PAYMENT (continued)

8. NO WAIVER OF LEGAL RIGHTS

(a) Upon completion of the work, the Owner will expeditiously make final inspection and notify the Contractor of acceptance. Such final acceptance, however, shall not preclude or stop the Owner from correcting any measurement, estimate, or certificate made before or after completion of the work, nor shall the Owner be precluded or be stopped from recovering from the Contractor or his Surety, or both, such overpayment as it may sustain by failure on the part of the Contractor to fulfill his obligations under the contract. A waiver on the part of the Owner of any breach of any part of the contract shall not be held to be a waiver of any other or subsequent breach.

(b) The Contractor, without prejudice to the Contract shall be liable to the terms of the Contract, shall be liable to the Owner for latent defects, fraud or such gross mistakes as may amount to fraud, and as regards the Owner's right under any warranty or guaranty.

9. TERMINATION OF CONTRACTOR'S RESPONSIBILITY

Whenever the improvement provided for by the Contract shall have been completely performed on the part of the Contractor and all parts of the work have been released from further obligations except as set forth in his bond and as provided in Section 8 above.

STANDARD SPECIFICATIONS

The Standard Specifications for Road and Bridge Construction of the State of New Hampshire Department of Transportation and any Addenda shall apply to all technical and measurement aspects of this project only.

However, the Standard Specifications for Road and Bridge Construction of the State of New Hampshire Department of Transportation and any Addenda shall NOT apply to General Requirements, Control of Work, Temporary Facilities, Payment, Insurance Requirements, etc. **with the exception that pavement escalation will be allowed in accordance with the NHDOT standard specifications.**

SHOP DRAWINGS

Shop Drawings for this project shall be submitted under the following conditions:

1. The Contractor shall submit working and detail drawings, well in advance of the work, to the City Engineer for review.
2. The Contractor's drawings shall consist of shop detail, erection and other working plans showing dimensions, sizes and quality of material, details and other information necessary for the complete fabrication and erection of the pertinent work.
3. The Contractor shall submit two (2) sets of drawings to the City Engineer.
4. Prior to the approval of the drawings, any work done or materials ordered for the work involved shall be at the Contractor's risk.
5. One (1) set of the drawings will be returned to the Contractor approved or marked with corrections to be made. After approval has been given, the Contractor shall supply the City Engineer with two sets of the revised detail working drawings.
6. The City Engineer's approval of the Contractor's working drawings will not relieve the Contractor from responsibility for errors in dimensions or for incorrect fabrication processes, or from responsibility to complete the contract work.

TECHNICAL SPECIFICATIONS

As noted above, the Standard Technical Specifications for this project are the Standard Specifications for Road and Bridge Construction of the State of New Hampshire Department of Transportation and any Addenda shall apply to all technical and measurement aspects of this project only.

SPECIAL CONDITIONS for WORTH PARKING LOT

REQUIRED:

The City has made certain representations to the business owners and stakeholders of this project. A very important part of this project will be maintaining access to all buildings and businesses at all times.

The following items are crucial to the success of this project:

The project may begin on Monday September 29, 2014.

It is critical that the parking lot be open to customers of the local businesses after work hours each night. That being said, signs will be required to inform public parkers that no overnight parking will be allowed and that owners will be towed at 6AM each morning. These signs shall be professionally made and of proper number to ensure compliance from the public. The recommended number of signs is a minimum of 6. The Contractor shall also provide no parking signs for areas of early morning work.

The binder level of paving in the parking lot will need to be completed by October 3, 2014 for weekend use.

Hours of work will be 7:00 am to 4:30 pm daily unless allowed by the Engineer.

Lighting Items will need to be ordered at least two months before the work starts in order to ensure that the parking lot is not without lighting when complete. Light towers or other accommodations need to be provided for the weekends and evenings if there is not adequate lighting as determined by the engineer. It is recommended that the existing lighting be maintained until the new system is able to be installed.

Final completion for the project must occur by October 10, 2014 before the Columbus Day Holiday.

Work includes: Pavement Grinding, removal of old lighting and planters, removal of a small decorative brick wall, moving dumpsters around, sign removal and storage, paving, structure resetting, lighting conduit, lighting with bases, new electrical cabinet with foundation and electrical service upgrade, striping, curbing and concrete sidewalk replacement.

See plan attached to bid for locations of items, layout and instructions for reconstruction.

It is critical that this parking lot is not upset for more than a two week period. 25% of the Mobilization (bid item 692) and 25% of the Maintenance of Traffic (bid item 619) are relatable and billable to this parking lot. If the timelines mentioned above are not met, these items may be deducted from the final payment.

SPECIAL PROVISION

ALL MANHOLES AND GRATES SHALL BE SUPPLIED IN ACCORDANCE WITH:

BUY AMERICA REQUIREMENTS

In accordance with the BUY AMERICA requirements of the Federal regulations, all manufacturing processes for steel and iron materials furnished for permanent incorporation into the work on this project shall occur in the United States. The only exception to this requirement is the production of pig iron and the processing, pelletizing and reduction of iron ore which may occur in another country. Other than these exceptions, all melting, rolling, extruding, machining, bending, grinding, drilling, coating, etc. must occur in the United States.

Products of steel include, but are not limited to, such products as structural steel, piles, reinforcing steel, structural plate, steel culverts, guardrail and steel supports for signs, signals and luminaires. Products of iron include, but are not limited to, such products as cast iron grates. Coatings include, but are not limited to, the applications of epoxy, galvanizing and paint. The coating material is not subject to this clause, only the application process.

A Certificate of Compliance, conforming to the requirements of Section 106.04, may be requested for steel and iron materials. The certificates, in addition to certifying that the materials comply with the specifications, shall also specifically certify that all manufacturing process of the materials, except as allowed by this Special Attention, occurred in the United States.

The requirements of said law and regulations do not prevent a minimal use of foreign steel and iron materials if the cost of such materials used does not exceed one-tenth of one percent (0.1%) of the total contract price or \$2,500.00, whichever is greater. The Contractor shall furnish the Engineer acceptable documentation of the quantity and value of any foreign steel and iron prior to incorporating such materials into the work.

SPECIAL PROVISION

AMENDMENT TO SECTION 306 – Reclaimed Stabilized Base

Item 306.208 8" Asphalt Stabilized Base Remove & Rehandle

This item is amended as follows:

Amend 2.1.1 to the following gradation:

<u>Sieve designation</u>	<u>% passing by weight</u>
2"	100
1 1/2"	70-100
3/4"	55-90
#4	40-75
#40	10-30
#200	3-10

Construction Requirements:

Add

3.13 Excavation & removal of excess materials to finish base elevation and compaction are all inclusive to this item. The road will be reclaimed, finish graded and compacted so that finish grade can be approved by the Engineer.

SUPPLEMENTAL SPECIFICATION

AMENDMENT TO DIVISION 400 – PAVEMENTS

AMENDMENT TO SUBSECTION 401 – PLANT MIX PAVEMENTS - GENERAL

The purpose of this Supplemental Specification is to reduce the number of ESALS required for each design category, and to require a minimum asphalt binder content for all mixes.

Amend 2.5.1 as follows:

2.5.1 When a new volumetric mix design is required, the Contractor shall use the Volumetric Mix Design Method in AASHTO Standard Practice R 35 to develop a mix that meets the associated design criteria. The Mix design shall follow the procedure detailed in AASHTO with the following exceptions: Amend Table 1 Superpave Gyrotory Compaction Effort to read as follows:

Design ESALs (Million)	N initial	N design	N max
0 < 5	6	50	75
≥5	7	75	115

Add the following:

Minimum Binder Content		
50 Gyration		75 Gyration
	³/₈ in (9.5 mm)	6.0%
5.8%	½ in (12.5 mm)	5.5%
4.9%	¾ in (19 mm)	4.6%
4.6%	1 in (25 mm)	4.3%

This required minimum asphalt content is based on the use of aggregate with a specific gravity of 2.65 to 2.70. The minimum asphalt content requirement may be adjusted when aggregate with a higher specific gravity is used, **or the minimum may be adjusted at the Engineer’s discretion if it is believed to be in the best interest of the City.**

Amend Table 3 in AASHTO M 323, referenced in AASHTO R 35, to read as follows:

Table 1 –Design Control Points*								
Standard	Nominal Maximum Aggregate Size							
Sieves	1 in (25 mm)		3/4 in (19 mm)		1/2 in (12.5 mm)		3/8 in (9.5 mm)	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
In (mm)	Percentage by Weight Passing Criteria (Control Points)							
2 (50.0)								
1-1/2 (37.5)		100.0						
1 (25.0)	100.0	90.0		100.0				
3/4 (19.0)	90.0		100.0	90.0		100.0		
1/2 (12.5)			90.0		100.0	90.0		100.0
3/8 (9.5)					90.0		100.0	90.0
No. 4 (4.75)							90.0	
No. 8 (2.36)	45.0	19.0	42.0	32.0	52.0	42.0	56.0	46.0
No. 200 (0.075)	7.0	1.0	8.0	2.0	10.0	2.0	10.0	2.0

All mix designs shall be submitted to the Department for verification and approval.

* Superpave designs will be accepted through the restricted zone, pending verification and approval by the Bureau of Materials & Research. The Contractor shall submit compaction data from trial blends at the optimum asphalt content and at 0.5% below and above the optimum asphalt content. The data shall include the temperature at which the HMA was aged.

SPECIAL PROVISION

AMENDMENT TO SECTION 604 – Catch Basins, Drop Inlets, and Manholes

Item 604.45(A) & 604.55(A) Adjust CB & Manhole Covers

Amend 3.3.1 to read

Prefabricated adjustable rings may be used where allowed by Engineer and shall be installed in accordance with the manufacturer’s recommendations so that the cover or grate is flush with the new pavement. If the existing frame grades are too low to be raised with one adjustable riser the structure under the frame is in failure or the existing frame is an odd size, than the frame and cover/grate shall be raised using bricks and mortar. If specified by item number for replacement, the frame and grate will be replaced with a new frame & grate or cover meeting the special provisions of ‘Buy America’.

Fabricated Steel Specs:

- Risers are manufactured of A-36 steel.
- All welding to American Welding Society specifications.
- Upper sections are 3/8" thick, lower sections are 3/4" thick, continuously welded.
- Adjustment device is solid 3/4" Type 304 stainless steel.
- Not plated mild steel nuts, which quickly deteriorate after installation.
- Adjustment nuts are solid 1" x 1 3/4" C1010 steel.
- Coated with black asphalt paint.

604.45	Adjust CB or MH Covers	Ea
604.72	Provide & Adjust CB or MH Covers	Ea

SPECIAL PROVISION

To Section 608 (NHDOT Standard Specifications) Sidewalks

**SECTION 608.24 & 608.26
CONCRETE SIDEWALK CONSTRUCTION**

Amend sections of section 608 to read:

Materials:

2.2 Portland cement concrete shall be Class AA conforming to 520.

2.3.1 Handicapped ramps (at street intersections) shall be 6” deep, class AA 4000 psi synthetic fiber reinforced with 6” x 6” x 10ga welded wire mesh sheets.

2.3.2 4” Sidewalks shall be reinforced with synthetic fibers.

Construction Requirements:

3.2.6 Joints: Construct crack control joints at 5’ intervals. Construct expansion joints at 25’ intervals.

Methods of Measurement:

4.1 This work shall be measured by the square foot of concrete sidewalk successfully & completely installed and approved by the Engineer.

Basis of Payment:

5.1 This work shall be paid for at the Contract Unit Price as listed in Item #608.24 & 608.26 in the Bid.

Pay Items and units:

608.24	4” Concrete sidewalk	Square foot
608.26	6” Concrete sidewalk (HC Ramps)	Square foot

This price shall include all equipment, material and labor incidental hereto.

SPECIAL PROVISION

To Section 608 (NHDOT Standard Specifications) Sidewalks **Item 608.52 – ADA Compliant Handicap Ramp Panels**

This special provision provides for the installation of handicap accessible ramp surfaces (Detectable Warning Pavers) to be in compliance with the Americans with Disabilities Act (ADA). This Special Provision provides for Item 608.52 and neither modifies nor amends any other provisions of this section unless specifically noted.

Description

1.1 This work shall consist of furnishing and installing a detectable warning surface and accessories on sidewalk ramps at locations shown on the plans, as specified herein, or as ordered including any and all required surface preparation. Detectable warnings shall be installed at sidewalk ramps where a sidewalk crosses a vehicular way, excluding unsignalized driveway crossings. The edge nearest the curbline shall be located 150 to 200 mm (6 to 8 in) from the back of the curbline. The paver shall be centered on the ramp.

Materials

2.1 Detectable Warning Device:

2.1.1 Material. The detectable warning surface shall consist of Engineered Plastic units. The units will be pressed into Portland cement or other Owner approved material. **The paver units shall be Armor Tile as manufactured and supplied by Engineered Plastic, Inc., 300 International Dr Suite 100, Williamsville, NY 14221, 1-800-769-4463, www.armor-tile.com**

2.1.2 Color. The color of the tile used shall be as determined by the Engineer, and would be installed in a concrete ramp as described above (608.26).

2.1.3 Paver Dimensions. Nominal paver dimensions shall be **2' deep x 3' wide.**

2.1.4 Detectable Warning Truncated Dome Geometry:

2.1.4.1 Detectable warnings shall be in full compliance with ADAAG guidelines (Title 49 DFR Transportation, Part 37.9 Standard for Accessible Transportation Facilities, Appendix A, Section 4.29.2- Detectable Warning on Walking Surfaces).

2.1.4.2 Size and spacing for truncated domes shall be as follows: base diameter of nominal 0.9 inch, top diameter of nominal 0.4 inch, height of nominal 0.2 inch, with a center to center spacing of nominal 2.35 inches.

2.1.4.3 The truncated dome pattern shall align properly from paver to paver if more than 1 paver is required.

2.2 Setting Bed Material

2.2.1 Material. Pavers shall be set into fresh concrete before it sets. See ramp specification above (608.26). Also see manufacturer instructions.

Construction Requirements

3.1 The Contractor shall submit manufacturer's installation instructions and descriptive literature for materials specified herein.

3.2 Transport, storage, and handling of products shall be in accordance with manufacturer's instructions.

3.2.1 All sealants/adhesives shall be protected from freezing conditions.

- 3.3 The air and surface temperatures during construction shall be in accordance with manufacturer's recommendations.
- 3.4 Concrete foundation shall be installed in accordance with the specifications included within Section 608 to depths indicated in the section shown on the plans.
- 3.5 Install detectable warning pavers in accordance with manufacturer's instructions directly in the setting bed and the allowing the top surface of the paver units to be at or just below the required finish grade.
- 3.6 Care shall be taken to ensure the safety of pedestrians when sidewalks must remain in service during construction.

Method of Measurement

- 4.1 These are measured by each panel installed successfully.

Basis of Payment

Pay Item and Unit

608.52	Detectable Warning Surface Panels	Each
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SPECIAL PROVISION

AMENDMENT TO SECTION 609 – Curbing Installation

Item 609.01, 609.02

Materials:

Add to 2.1: Curbing will be manufactured by Swenson Granite Works, Concord NH.

SPECIAL PROVISIONS
(not a NHDOT Standard Specification)

Sections 614, 616, 625

ELECTRICAL WORK

PART I – GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings also apply to work of this section.
- B. The Contractor must be familiar with all other Sections of this specifications and the associated Drawings, which affect the scope of work. Where paragraphs of this Section conflict with similar paragraphs elsewhere, the more stringent requirements shall prevail.

1.02 DESCRIPTION OF WORK

- A. The Contractor shall furnish a complete finished product, which meets all applicable codes and standards, and the intent and specific requirements of the Drawings and specifications for this project. It is the intent of these specifications that the electrical system shall be suitable in every way for the service (and use) required. All materials and all work, which may be reasonably implied as being incidental to the work of this Section, shall be furnished at no extra cost to the Owner.
- B. As used in this Section, “*provide*” means “furnish and install”, “*furnish*” means “to purchase and deliver to the project site complete with every necessary appurtenance and support”, and “*install*” means “to unload at the delivery point at the site and perform every operation necessary to establish secure mounting and correct operation at the proper location in the project”.
- C. Perform work and provide (furnish and install) material and equipment as shown on Drawings and as specified, or indicated, in this Section of the specifications. Completely coordinate work of this Section with work of other trades and provide a complete and fully functional installation. Drawings and specifications form complimentary requirements; provide work specified and not shown, and work shown and not specified as though explicitly required by both. Although work is not specifically shown or specified, provide supplementary or miscellaneous items, appurtenances, devices and materials obviously necessary for a sound, secure and complete installation.
- D. Remove all debris caused by Contractors’ work.

- E. Provide demolition, removal and relocation of existing electrical items as shown on the drawings.
- F. The work under this section shall require that the Contractor provide all labor, materials, equipment, tools, supplies and transportation involved in the installation of electrical equipment as specified.
- G. The work to be done under this contract generally includes, but is not limited to the following:

Electrical System

1. Upgrade electrical service and electrical cabinet in the Worth Parking Lot. All PSNH fees are the responsibility of the contractor. The City will waive permit fees.
2. Provide new conduit and handhole system for outdoor electrical work, in locations as shown on Contract Drawings. Provide precast concrete electric handholes (14"x14"x24") in locations as shown or as needed and "Electric" logo on cover rated for H-20 loading.
3. Provide new light pole pre-cast or cast in place concrete bases for new proposed lighting poles in locations and quantities as shown on Contract Drawings. Precast foundations to be reinforced with wire and bolt patterns shall be as shown on Manufacturer Drawings, to match the proposed light poles.
4. Install new decorative light poles and fixtures, along with necessary accessories in quantities and locations as shown on Contract Drawings.
5. Provide conduit and cabling for outdoor lighting between fixtures, hand holes, etc.
6. Conduits outside below grade to be PVC Schedule 40. Conduit sizes as indicated on Contract Drawings. Provide all necessary grounding, including ground rods at each light pole foundation if required by NEC or local authorities.
7. Provide startup services for new lighting system.
8. Provide other associated electrical equipment necessary for a complete system, shown, or implied in these Specifications and on Contract Drawings.

Electrical Cabinet

1. Provide new NEMA 3R Electrical Cabinet for outdoor power on new cast-in-place concrete foundation. Foundation to include reinforcement,

conduit stubs and grounding, per local and NEC requirements and should provide a mounting surface 12” above finish grade. Provide cabinet with service entrance rated distribution panelboard (min. 20 space), lighting contactor, photocell, circuit breakers, outlet (one duplex inside). Cabinet to be traffic style, type M as manufactured by Bison Prefab or approved equal. Cabinet to be constructed of 1/8” thick 5052 aluminum alloy, powder coated white inside and gloss black outside. Cabinet to be provided with uni-strut mounted aluminum sheet along back panel for the purpose of mounting panels and controls. Cabinet to be provided with #2 Corbin style lock and ventilation panel. Panel boards and equipment to be Square-D. City to approve shop drawing(s) for cabinet and associated controls prior to purchase.

2. This cabinet also feeds the lighting and outlets in the Vaughn Mall. Those circuits will need to be incorporated into the new cabinet to ensure a complete installation. Review of the existing controls are available upon request.

1.03 SITE VISIT

- A. Each bidder shall visit the site of the proposed work and fully acquaint himself with the conditions there relating to construction and labor, and should fully inform himself as to the facilities involved, and the difficulties and restrictions attending the performance of the Contract. The Bidder should thoroughly examine and familiarize himself with Drawings, Technical Specifications and all other Bid and Contract Documents. The Contractor, by the execution of the Contract, shall in no way be relieved of any obligation under it due to his failure to receive or examine any form or legal document or to visit the site and acquaint himself with the conditions there existing and the Owner will be justified in rejecting any claim thereof.

1.04 GUARANTEE

- A. Guarantee work of this Section in writing for one year from date of Owner’s acceptance. Repair or replace defective materials, equipment, workmanship and installation that develop within this period, promptly and to Owner’s satisfaction and correct damage caused in making necessary repairs or replacements under guarantee with no extra cost to Owner. Contractor shall transfer all equipment warranties for all systems to Owner.

1.05 REFERENCE STANDARDS AND SPECIFICATIONS

- A. Perform work strictly as required by rules, regulations, standards, codes, ordinances, and laws of local, state, and federal government, and other authorities that have lawful jurisdiction.

- B. All materials and installations shall be in accordance with the latest edition of the National Code, and all applicable local codes and ordinances. Materials and equipment shall be listed by Underwriters Laboratories (UL). Special Attention shall be paid to the latest edition of the following standards:

American National Standards Institute	ANSI
American Society for Testing & Materials	ASTM
Illuminating Engineering Society	IES
Institute of Electrical & Electronics Engineers	
IEEE	
Insulated Cable Engineers' Association	ICEA
National Electrical Code	
	NEC
National Electrical Manufacturer's Association	
NEMA	
National Electrical Safety Code	
	NESC
InterNational Electrical Testing Association	NETA
National Fire Protection Association	
	NFPA
Occupational Safety & Health Administration	
OSHA	
Underwriter's Laboratories, Inc.	UL

- C. The above listed codes and standards are referenced to establish minimum requirements and wherever this Section requires higher grades of materials and workmanship than required by the listed codes and standards, this Section shall apply. In the event a conflict occurs between the above listed codes and standards and this Section, the more stringent requirement shall govern.

1.06 SUBMITTALS

- A. Within 10 days after Award of General Contract, submit shop drawings and product data on below listed items for approval. Submit copies as requested.
- B. Check, stamp and mark with project name shop drawings and product data before submitting for approval. Specifically indicate on shop drawing transmittal

form, or by separate letter any deviations from Contract Documents because of standard shop practice or other reason. Rectify with no extra cost to Owner, deviations which escape Engineer's scrutiny and have not been indicated on shop drawings.

- C. List of materials and equipment requiring shop drawings shall include:
 - 1. Concrete Products and Light Bases
 - 2. Hand holes

- D. The Engineer's review shall be only for conformance with the design concept of the project and compliance with the specifications and Drawings. The responsibility of, and the necessity of, furnishing materials and workmanship required by the specifications and Drawings which may not be indicated on the shop drawings is included under the work of this Section.

1.07 INSPECTIONS AND FEES

- A. Obtain all necessary permits and licenses, file necessary plans and pay all fees for hookups. Permit fees will be waived as part of his bid, as is all coordination as fees with the local utility. Contractor is also responsible for obtaining any site-specific utility requirements for this project prior to the start of construction and notifying local utility for all inspections prior to backfilling, etc.

1.08 INTERPRETATION OF DRAWINGS

- A. Drawings are diagrammatic and indicate general arrangement of systems and work included in Contract. Drawings are not intended to specify or show every offset, fitting or component; however, Contract Documents require components and materials whether or not indicated or specified as necessary to make installation complete and operational.

- B. Any work installed contrary to, or without review by, the Engineer shall be subject to change as directed by the Engineer, and no extra compensation will be allowed for making these changes.

- C. Circuit layouts are not intended to show the number of fittings, or other installation details. Additional circuits shall be installed wherever needed to conform to the specific requirements of the equipment or local codes.

- D. As work progresses and for duration of Contract, maintain complete and separate set of prints of Contract Drawings at job site at all times. Record work completed and all changes from original Contract Drawings clearly and accurately, including work installed as a modification or addition to the original design

PART II – MATERIALS & PRODUCTS

2.01 GENERAL

- A. Materials and products furnished shall be designed for the intended use, shall meet all requirements of the latest edition of the National Electric Code (NEC), and all local codes.
- B. Materials shall be manufactured in accordance with the standards indicated in this Section, and typical industry standards and codes for the products specified. Materials and equipment shall be Underwriter's Laboratory (UL) listed.
- C. The materials used shall be new, unused, and of the best quality for the intended use. All equipment shall have the manufacturer's name, address, model or type designation, serial number and all applicable ratings clearly marked thereon in a location which can be readily observed after installation. The required information should be marked on durable nameplates that are permanently fastened to the equipment.
- D. Electrical equipment shall at all times during construction be adequately protected against mechanical injury or damage by water. Electrical equipment shall not be stored outside exposed to the elements. If any equipment or apparatus is damaged, such damage shall be repaired at no additional cost, or replaced at no additional cost as directed by the Engineer.

2.02 RACEWAYS

- A. Rigid Metallic Conduit: UL6 and ANSI C80.1.
- B. Flexible Metallic Conduit: UL1. Liquidtight® flexible metal conduit shall be used in wet locations.
- C. Polyvinyl Chloride (PVC) Conduit, electrical, gray, Schedule 40 or 80 as specified, meeting the requirements of UL 651 and NEMA TC-2. If concrete encasement is required, a minimum of 3,000 psi concrete shall be used.
- D. Minimum size of conduit shall be 2". Unless indicated on Drawings, conduit sizes can be sized in accordance with National Electric Code (NEC). Conduit bends shall not have kinks or flats, and shall not be less than standard radii.
- E. Expansion fittings shall be provided on all conduits as required by the 2008 National Electrical Code, and as required by local and state codes. This includes, but is not limited to, vertical conduit risers coming from below-grade.

2.03 WIRE AND CABLE

- A. Unless otherwise noted, conductors for power, lighting, and grounding *above grade* shall be No. 12 through No. 2 AWG, NEC type THWN/THHN, meeting the requirements of UL 83. Conductors for power and lighting shall be no smaller than No. 12 AWG. **All underground pole to pole conductors shall be No. 8 (or larger if required). Assume 250 Watts per fixture for circuit and voltage drop calculations.**
- B. Where required by code, conductors for power, lighting, grounding, and control *below grade* (and in wet locations) shall be No. 2 AWG and larger, NEC type XHHW (or XHHW-2), meeting the requirements of NEMA WC7 and ICEA S-66-524.
- C. All conductors shall be annealed copper, 98% conductivity, Class B stranded, except conductors used for power and lighting circuits No. 10 AWG and smaller which may be solid. All conductors should be rated for 600 volts or less, with a thermal rating of 90° C.
- D. The outside covering of all wiring for power, lighting, grounding, and control uses shall be color coded to identify polarity.

2.04 WIRE AND CABLE CONNECTORS AND DEVICES

- A. Wire and cable connectors and devices shall meet the requirements of UL 486. Connectors, including miscellaneous nuts, bolts, and washers shall be silicon bronze. Ferrous materials shall not be used. All connectors below grade shall be water-proof secondary type, gel-filled, bolted submersible connectors (gel-port style). No “wire-nuts” are allowed to be used below grade. **All electrical connections shall be coated in anti-corrosive grease.**

2.05 BOXES

- A. Pull Boxes, Junction Boxes, and Equipment Enclosures: NEMA ICS 6.
- B. Pull boxes, junction boxes, and equipment enclosures shall be of NEMA Type 1 construction for indoor use, and NEMA Type 3R construction for outdoor or wet location use, unless otherwise noted.
- C. Box sizes shall not be less than that required by the National Electrical Code.

2.06 WARNING TAPE

- A. Warning tape shall be six (6) inches wide, polyethylene not less than 3.5 mil thick with a minimum strength of 1,500 psi. Install 12 inches below final grade. Tape shall be red for electric conduit, and red or yellow for communication conduit. Tape shall have black lettering on two lines as indicated below:

- B. For Electric conduit:

CAUTION	CAUTION	CAUTION
BURIED	ELECTRIC LINE	BELOW

2.07 ELECTRIC HANDHOLES

- A. Electric Handholes are to be precast concrete and provided in the dimensions as shown on the Contract Drawings. Handhole size as indicated on Contract Drawings.

- B. Handholes shall be provided with skid-resistant cast iron surface covers, with an “Electric” logo. Handholes and Covers shall be design for street-rated, heavy duty applications, meeting the requirements of the either: AASHTO HS-20 loading, with a minimum design load of 15,000 lbs for both the handhole box and cover. . Handholes shall meet the requirements of the latest edition of the National Electric Code (2008 or later) with regards to structural integrity, installation methods, grounding of the cover and metallic parts, etc.

- C. A layer of 6-inches of crushed rock shall be installed below and in the bottom of each handhole to assist with drainage, and this compacted gravel base material shall extend out beyond the sidewalls of the handhole. Conduits shall sweep up and be at least 4-inches above top of crushed rock layer.

- D. Handhole size to be 14”W x 14”L x 24”D minimum for this project.

2.08 FOUNDATIONS FOR LIGHTING POLES

- A. Provide approved precast foundations, and other devices as necessary and as required.

- B. Foundations for 25-foot light poles shall be as required by manufacturer, including number, type and location of anchor bolts. Foundations shall be made of minimum 5,000 psi concrete (at 28 days) and have steel reinforcement meeting ASTM A-615, grade 60 (cover to steel, 1” minimum). Foundations shall have 2-2” conduits for lighting circuits, 180 degrees apart. Foundations to be installed with the top of the concrete approximately 24” inch above final grade. Foundation minimum size is 15” diameter x 4’-0” in length or as determined by

the pole manufacturer. Conduits to be flush with top of concrete to not interfere with anchor bolts or pole base.

- C. Pole to base connection threads shall be coated in ‘blue’ removable type locktite or approved equal. All access door connections will be coated in non-corrosive grease.

2.09 LIGHTING

Install light poles and fixtures in quantities and locations as shown.

Light Pole & Fixture: # 4 LEDG 060 35 5K AS K L4 LEDGF1FUS10C BR1065 BK RTA2570E PL ND AK 4 As manufactured by Holophane

LEDgend (LEDG): LEDgend Roadway LED, 60 LEDS, 350mA Driver, 5,000 K CCT, Auto-sensing voltage, 120 thru 277, Black, Type IV Forward Throw, Single Fusing F1 BR1065: BR1065 Aluminum Arm 2 @ 180, Black (RTA2570E) Round Tapered Aluminum Pole 25FT, 7.0 x 4.0 x .156 Wall: RTA2570E, Plain Top, No Drill Pattern, Black Anodized, Anchor Bolts, Vibration Dampener

The City has already had these lights quoted by the manufacturer, copy of the quote available upon request.

PART III – EXECUTION

3.01 GENERAL

- A. This Section covers the requirements for installation of materials, proper workmanship, testing, cleaning, grounding, and work methods to be followed by the Contractor. This Section also includes specific instructions and to be used in conjunction with the contract Drawings. Any discrepancies noted between the specification, Drawings, and actual installation shall be reported immediately to the Owner, Engineer, and Architect. Failure on the part of the Contractor to report discrepancies immediately will be considered negligent and Contractor will be responsible for correcting actions at no cost to Owner.
- B. Contractor is responsible for coordinating work with other trades, Owner, and Architect’s schedule. Work will be coordinated such that systems can be properly located, and conflicts and delays are avoided. Contractor shall consider commencement of work acceptance of existing conditions.

3.02 MATERIALS AND WORKMANSHIP

- A. Work shall be executed in workmanlike manner and shall present neat, rectilinear and mechanical appearance when completed. Do not run raceway exposed unless shown exposed on Drawings. Material and equipment shall be new and installed

according to manufacturer's recommended best practice so that complete installation shall operate safely and efficiently.

3.03 CONTINUITY OF SERVICES

- A. Do not interrupt existing services without Owner's, Utilities, Engineer's and Architect's approvals.

3.04 TESTING, INSPECTION AND CLEANING

- A. Test wiring and connections for continuity and grounds before fixtures are connected; demonstrate insulation resistance by megger test as required at not less than 500 volts. Insulation resistance between conductors and grounds for secondary distribution systems shall meet National Electrical Code (NEC) and interNational Electrical Testing Association (NETA) requirements.
- B. Verify and correct as necessary: voltages, tap settings, trip settings and phasing on equipment from secondary distribution system to point of use. Test secondary voltages at transformers, bus in panelboards, and at other locations on distribution systems as necessary. Test secondary voltages under no-load and full-load conditions.
- C. Test lighting fixtures with specified lamps in place for 100 hours. Replace lamps that fail within 90 days after acceptance by Owner at no extra cost to Owner (no exceptions).
- D. Provide necessary testing equipment and testing services.
- E. Failures or defects in workmanship or materials revealed by tests or inspection shall be corrected promptly and retested. Replace defective material.

3.05 WIRING METHODS

- A. Install wire and cables in approved raceways as specified and as approved by authorities that have jurisdiction.
- B. Follow homerun circuit numbers and/or notes as shown on Drawings to connect circuits to panelboards. Where homerun circuit numbers are not shown on Drawings, divide similar types of connected loads among phase buses so that currents are approximately equal in normal usage.
- C. Run concealed conduit in as direct lines as possible with a minimum number of bends of longest possible radius. Run exposed conduit parallel to or at right angles to building/field lines. Bends shall be free from dents or flattening. The exact locations and routing of conduit shall be determined by the Contractor subject to the approval of the Owner and Engineer.

- D. Polarity of all electrical connections shall be observed in order to preserve phase relationship in all feeders and equipment.
- E. Splices shall be made in neat, workmanlike manner using approved mechanical connectors. After splicing, insulation equal to that on the spliced wires shall be applied at each splice. Splices are permitted only in junction boxes, outlet boxes, or other permanently accessible locations. Splices installed in electric handholes shall be weather and waterproof, pre-molded polymer splices. Hand taping of splices below-grade is not acceptable.

3.06 GROUNDING

- A. Bond and ground equipment and systems connected under this Section in accordance with standards of the NEC and other applicable regulations and codes.
- B. Copper fittings for ground connections shall conform to the requirements of ASTM B 30. All bolts, u-bolts, cap screws, nuts, and lock washers for copper fitting shall be of approved corrosion-resisting material. Compression connectors required for all below-grade grounding connections. Exothermic (cad-weld) connectors are also acceptable for use below grade. The use of bolted grounding and ground rod connectors below grade is not acceptable.
- C. Ground Rods shall be 5/8" diameter and 8' in length, as required by applicable codes (NEC, NESC). All wire used for grounding shall be no smaller than #4 Awg copper, stranded conductor.

3.07 INSTALLATION OF LIGHTING FIXTURES

- A. Verify construction of light pole foundations is suitable, and provide fixtures, poles, hardware, and other accessories suitable for construction encountered.
- B. Coordinate installation of fixtures with installation of surrounding materials and landscaping (if applicable). Investigate lighting fixture locations and foundation supports to ensure that no interference exists between lighting fixtures, supports, and other equipment including that provided by other trades. Report any possible interference's to the Engineer.

3.08 EXECUTION – INSTALLATION OF ELECTRICAL EQUIPMENT

- A. Contractor to Provide (furnish & install) all items.
- B. Contractor to meet with local wiring inspector prior to the start of any work and obtain any local site requirements and restrictions, which must be followed. Contractor shall also meet with local utility, any other Town/City officials, as directed by Owner and wire inspector, prior to the start of work, or ordering of materials. Failure to meet with the local officials and utility prior to ordering

materials and start of construction will be considered negligent and all necessary corrections resulting from this failure will be at no cost to Owner.

- C. Provide, furnish and install all products and work outlined in this Specification.
- D. Provide all grounding of electrical lighting. Grounding to be installed per installation details and National Electrical Code.
- E. Balance the lighting, or electrical load evenly on all circuits and on all phases of each circuit.
- F. Provide new hand holes and conduit system for lighting and electrical work, in locations as shown on Contract Drawings.
- G. Install all equipment in locations as shown on Contract Drawings. All deviations must be approved, in advance by Engineer.
- H. Install all equipment per manufacturer's instructions.
- I. Clean-up excavated areas, and restore with new loam & seed or pave to match existing surfaces, as directed by Engineer.

SPECIAL PROVISIONS

AMENDMENT TO SECTION 618.6 – Uniformed Officers

AMENDMENT TO SECTION 618.7 – Traffic Control Flaggers

AMENDMENT TO SECTION 619 – Maintenance of Traffic

The construction work zone(s) designated for this contract shall extend approximately 500 feet, beyond the work limits as described below and/or shown on the project layout map

618.6 UNIFORMED OFFICERS

Whenever the contractor is working in street intersections, Portsmouth Police officers will be hired to conduct traffic details. Only Portsmouth Police can be hired for traffic details. Traffic details on the other streets will be under the discretion of the Engineer.

618.7 TRAFFIC CONTROL FLAGGERS

Whenever the contractor is working in areas where uniformed officers are not required by the City, flaggers may be hired under the discretion of the Engineer.

619 MAINTENANCE OF TRAFFIC

Add to 619:

All work shall be prosecuted so pedestrian and traffic flow can be maintained whenever possible. No travel lane or sidewalk closures will be allowed without prior approval from the Engineer.

The Contractor will develop a construction staging plan for this project. The plan shall be submitted to be approved by the Engineer.

Access shall be maintained to the abutting driveways at all times during construction.

Pedestrian walkways etc. may be ordered by the Engineer if the need arises.

Dust and traffic control may be ordered by the Engineer.

All costs associated with the application of these measures or other measures directed by the Engineer shall be paid for under these items and will not be further chargeable to the project, except as stipulated and specified under Contract Items.

Method of Measurement:

The uniformed officer work shall be measured by the exact cost billed to the contractor based on the man-hours worked.

The flagger work shall be measured by the exact cost billed to the contractor based on the man-hours worked.

The traffic control items shall be measured on a unit basis under Maintenance of Traffic.

Basis of Payment:

This work shall be paid for from the Contract Price Allowance as listed under Items 618.6 & 618.7 in the Bid Proposal Form using the actual man-hours worked in the field on the project.

This work shall be paid for from the Contract Unit Price as listed under Item 619 (Maintenance of Traffic). This unit price shall include all equipment, materials and labor thereto.

NOTE: SEE SPECIAL PROVISION REGARDING WORTH PARKING LOT

SPECIAL PROVISION
(not a NHDOT Standard Specification)
AMENDMENT TO SECTION 626 - MISCELLANEOUS INCIDENTALS
Item 626 Electronic Meter Reset

Description

1.1 This work shall consist removing, transferring and reinstalling electronic parking meters

Materials

2.1 The meters are to be removed for the reconstruction and then returned and reinstalled, meter foundations shall be retained for reuse by the contractor or new foundations will need to be reconstructed. Meter foundations and bolt assemblies lost shall be provided by the Contractor at no additional cost.

2.2 Concrete

2.2.1 Concrete shall meet the requirements of 608.24. The concrete is subsidiary to this item.

Construction Requirements

3.1 General

3.1.1 The Contractor shall submit manufacturer’s descriptive literature for materials specified and shop drawings showing procedures for installation of units.

3.1.2 Material damaged due to the Contractor's negligence shall be replaced with new materials at the Contractor's expense.

3.1.3 Concrete shall be placed in accordance with Section 608.24.

Method of Measurement

4.1 These units will be measured per each.

Basis of Payment

The accepted quantity of meters removed and reset will be paid for at the Contract Unit Price per each, complete in place. The price bid under this item shall be considered as fair compensation for all labor, equipment, tools, supervision, and materials necessary to complete the work associated with construction and installation of benches as shown on the Plans, and specified herein. The work shall include, but not limited to the units, and all other work required to complete installation not paid for under other items as specified herein.

Pay Item and Unit:

626 Reset Electronic Parking Meter Ea

SPECIAL PROVISION
(not a NHDOT Standard Specification)
AMENDMENT TO SECTION 661 - MISCELLANEOUS INCIDENTALS
Item 661.1 Bollards

Description

1.1 This work shall consist of installing bollards around the parking meters as shown on the plans or as ordered.

Materials

2.1 6” Steel, concrete filled bollards covered with yellow plastic decorative sleeve 36” high above ground, 24” minimum bury depth.

2.2 Concrete

2.2.1 Concrete shall meet the requirements of 608.24. The concrete is subsidiary to this item.

Construction Requirements

3.1 General

3.1.1 The Contractor shall submit manufacturer’s descriptive literature for materials specified and shop drawings showing procedures for installation of units.

3.1.2 Material damaged due to the Contractor's negligence shall be replaced with new materials at the Contractor's expense.

3.1.3 Concrete shall be placed in accordance with Section 608.24.

Method of Measurement

4.1 These units will be measured per each.

Basis of Payment

The accepted quantity of bollards will be paid for at the Contract Unit Price per each, complete in place. The price bid under this item shall be considered as fair compensation for all labor, equipment, tools, supervision, and materials necessary to complete the work associated with construction and installation of benches as shown on the Plans, and specified herein. The work shall include, but not limited to the units, and all other work required to complete installation not paid for under other items as specified herein.

Pay Item and Unit:

661.1 Bollards Ea

SPECIAL PROVISION
(not a NHDOT Standard Specification)
AMENDMENT TO SECTION 661 - MISCELLANEOUS INCIDENTALS
Item 661.4 Bike Racks

Description

1.1 This work shall consist of installing Bike Rack stations at the locations shown on the Plans or as ordered.

Materials

2.1 Bicycle racks are the ground mounted U/2 Inverted-U Rack Vintage Racks as manufactured by Cycle-Safe, Inc., 4630 Ada Drive, Suite B, Ada, MI 49301, (888)-950-6531, or approved equal. These will be provided by the City.

2.2 Concrete

2.2.1 Concrete shall meet the requirements of 608.24. The concrete is subsidiary to this item.

Construction Requirements

3.1 General

3.1.1 The Contractor shall submit manufacturer's descriptive literature for materials specified and shop drawings showing procedures for installation of units.

3.1.2 Material damaged due to the Contractor's negligence shall be replaced with new materials at the Contractor's expense.

3.1.3 Concrete shall be placed in accordance with Section 608.24.

Method of Measurement

4.1 These units will be measured per each.

Basis of Payment

The accepted quantity of bike racks will be paid for at the Contract Unit Price per each, complete in place. The price bid under this item shall be considered as fair compensation for all labor, equipment, tools, supervision, and materials necessary to complete the work associated with construction and installation of benches as shown on the Plans, and specified herein. The work shall include, but not limited to the units, and all other work required to complete installation not paid for under other items as specified herein.

Pay Item and Unit:

661.4 Bike Racks Each

March 15, 2013

**SPECIAL ATTENTION
ASPHALT CEMENT ADJUSTMENT**

All bid items involving asphalt concrete mixtures (except items 403.4 & 403.6) listed in Sections: 403, Hot Bituminous Pavement and 411, Plant Mix Surface Treatment; containing asphalt cement will be subject to a price adjustment. This adjustment will take effect when the monthly price for asphalt cement as furnished by the Bureau of Materials and Research differs from the base price contained in the proposal.

The price adjustment will be based on the percent of virgin asphalt cement stated in the Approved Mix Design containing the maximum percentage of reclaimed asphalt pavement. In the event of breakdown or unforeseen circumstances other than weather, an Approved Virgin Mix Design may be used. The price adjustment will then be based on the total percent of virgin asphalt cement in that approved design.

**The base price* of asphalt cement for this Contract is:
\$ xxxxxx per ton on English Projects.**

* Source: The base price is developed from data published in the *Asphalt Weekly Monitor*, a publication from Poten and Partners, Inc. (Applies to contracts advertised after January 1, 2012)

The **monthly price** of asphalt cement will be furnished by the Bureau of Materials and Research on the first business day following the 14th calendar day of each month.

The contract prices of Hot Bituminous Pavement, Recycled Bituminous Pavement and Plant Mix Surface Treatment will be paid under the respective items in the contract. The price adjustment, as provided herein, upwards or downwards, will be made at the end of each month in which the work was accomplished as follows:

A contract adjustment will be made under Item 1010.2 based on; [monthly price minus the base price] X [Approved Mix Design percent of virgin asphalt cement] X [tons of pavement used].

When no item for Asphalt Cement Adjustment is included in the contract no adjustments will be made.

Item 1010.2 Asphalt Cement Adjustment 1 Dollar
1 Not a bid item

Projected Project List			
Portsmouth Boulevard Market St to Osprey Drive		(Grind and Pave, Mill near Market St)	
Item #	Description	Est. Quant.	
203.1	Common Excavation (Extra Reclaim)	660	Cy
214	Fine Grading (Maintain Existing Finish Grade)	4333	Sy
306.208	8" Reclaim Stab. Base (Remove 5 1/2")	4333	Sy
403.11	5 1/2" Machine Pave (50 gyr)	1400	Tons
410.22	Tack Coat	4333	Sy
417	Cold Plane	700	Sy
604.0007	Polyethylene Liner	9	Ea
604.45	Adjust CB or MH Covers	10	Ea
609.5	Reset Sloped Curb as necessary	200	Lf
611.90001	Adjusting Water Gates and Shutoffs	2	Ea
616.65	6' x 50' traffic signal detector loop	3	Ea
618.7	Flaggers	80	Hr
619	Maintenance of Traffic	0.15	Ls
632.0104	4" Painted Lane Striping	4600	Lf
632.3112	12" Thermoplastic Line	100	Lf
632.3124	24" Thermoplastic Line	65	Lf
632.32	Thermoplastic Symbol or Word	208.2	Sf
641	Loam & Seed	10	Cy
692	Mobilization	0.15	U
1010.2	Escalation		\$
	Street Total		
Worth Parking Lot on Maplewood Ave (See special instructions, plan and dates)		(Grind and Pave 4" Thick)	
Item #	Description	Est. Quant.	
203.1	Common Excavation (Extra Reclaim)	508	Cy
203.3	Unclassified Excavation (Remove planters, Light Poles, sidewalk)	1	U
214	Fine Grading (Maintain Existing)	4500	Sy
306.208	8" Reclaim Stab. Base (Remove & Rehandle)	4500	Sy
403.11	4" Machine Pave (50 gyr)	1030	Tons
410.22	Tack Coat	4500	Sy
604.0007	Polyethylene Liner	1	Ea
604.72	Provide and Install New CB Grate and Frame	1	Ea
608.24	4" Concrete Sidewalk & Island Fill	1700	Sf
609.01	5" Straight Granite Curb	470	Lf
609.02	5" Curved Granite Curb	14	Lf
614.7214	2" schedule 40 Conduit	260	Lf

616	Electrical Work for Lighting	1	U
616.551	Electrical Cabinet Foundation	1	Ea
618.7	Flaggers	40	Hr
619	Maintenance of Traffic	0.25	Ls
625	Light Pole Bases	4	Ea
625A	Remove Old Light Poles & Bases	5	Ea
625.52	Light Pole with Luminaire	4	Ea
626	Reset Electronic Parking Meter	3	Ea
632.0104	4" Painted Lane Striping (Parking)	2600	Lf
632.02	Painted Handicapped Symbol on Blue Background	5	Ea
632.3124	12" Thermoplastic Line	40	Lf
632.32	Thermoplastic Symbol or Word	62	Sf
661.1	Install Bollards	10	Ea
661.4	Install Bike Racks	6	Ea
692	Mobilization	0.25	U
1010.2	Escalation		\$
Madbury Treatment Plant (Pave plant parking lot and well road)		(Grind and Pave)	
Item #	Description	Est Quant	
214	Fine Grading	3400	Sy
304.32	Shoulder Gravel	150	Cy
306.21	8" Reclaim Stab. Base (Remove & Rehandle)	3400	Sy
403.11	Machine Pave (Binder)	580	Tons
403.11	Machine Pave (Top)(parking lot)	362	Tons
410.22	Tack Coat	4238	Sy
632.0104	4" Painted Lane Striping (Parking)	300	Lf
632.02	Handicapped Symbol on Blue Background	1	Ea
1010.2	Escalation		\$
Hoover Drive (Lafayette to Taft)		(Shim & PMST)	
Item #	Description	Est. Quant.	
403.98	Hot Bituminous Leveling Course	100	Tons
411.43	3/8" PMST (1" Thick Average)	290	Tons
410.22	Tack Coat	5100	Sy
417A	Cold Plane (Butt Joints)	100	Sy
618.7	Flaggers	24	Hr
619	Maintenance of Traffic	0.05	Ls
692	Mobilization	0.05	U
1010.2	Escalation		\$

South Street (Sagamore Ave to Marcy St)		(Shim & PMST)	
Item #	Description	Est. Quant.	
403.98	Hot Bituminous Leveling Course	300	
411.43	3/8" PMST (1" Thick Average)	600	Tons
410.22	Tack Coat	10506	Sy
417A	Cold Plane (Butt Joints)	300	Sy
618.6	Portsmouth Police (Traffic Control)	24	Hr
618.7	Flaggers	80	Hr
619	Maintenance of Traffic	0.15	Ls
632.0104	4" Painted Lane Striping	13,400	Lf
632.3112	12" Thermoplastic Line	1200	Lf
692	Mobilization	0.15	U
1010.2	Escalation		\$
Greenleaf (Bypass to Peverly) & Peverly (Spot shims)		(Shim & PMST)	
Item #	Description	Est. Quant.	
403.98	Hot Bituminous Leveling Course	250	
411.43	3/8" PMST (1" Thick Average)	750	Tons
410.22	Tack Coat	13104	Sy
417A	Cold Plane (Butt Joints)	100	Sy
618.6	Portsmouth Police (Traffic Control)	24	Hr
618.7	Flaggers	32	Hr
619	Maintenance of Traffic	0.1	Ls
632.0104	4" Painted Lane Striping	10,000	Lf
632.3112	12" Thermoplastic Line	60	Lf
692	Mobilization	0.1	U
1010.2	Escalation		\$
Cottage St (Bypass to Woodbury Ave)		(Mill & Pave)	
Item #	Description	Est. Quant.	
304.32	Shoulder Gravel	20	Cy
403.11	Machine Pave	340	Tons
403.12	Hand Pave	10	Tons
410.22	Tack Coat	3500	Sy
417	Cold Plane	3500	Sy
604.45	Adjust CB or MH Covers	5	Ea
611.90001	Adjusting Water Gates and Shutoffs	3	Ea
618.6	Portsmouth Police (Traffic Control)	24	Hr

618.7	Flaggers	16	Hr
619	Maintenance of Traffic	0.1	Ls
632.0104	4" Painted Lane Striping	2,200	Lf
632.3112	12" Thermoplastic Line	100	Lf
632.32	Thermoplastic Symbol or Word	79	Sf
692	Mobilization	0.1	U
1010.2	Escalation		\$
Monteith		(Grind and Pave)	
Item #	Description	Est. Quant.	
203.1	Common Excavation	103	Cy
214	Fine Grading	1240	Sy
306.208	8" Reclaim Stab. Base (Remove & Rehandle)	1240	Sy
306.36	Stone for Reclaimed Stabilized Base (if needed)	20	Tons
403.11	4" Machine Pave (50 gyr)	285	Tons
403.12	Hand Method Pave (50 gyr)	15	Tons
410.22	Tack Coat	1240	Sy
611.90001	Adjusting Water Gates and Shutoffs	3	Ea
618.7	Flaggers	42	Hr
619	Maintenance of Traffic	0.1	Ls
641	Loam & Seed	15	Cy
692	Mobilization	0.1	U
1010.2	Escalation	1	\$
Mill Pond Way		(Grind and Pave)	
Item #	Description	Est. Quant.	
203.1	Common Excavation	163	Cy
214	Fine Grading	1950	Sy
306.208	8" Reclaim Stab. Base (Remove & Rehandle)	1950	Sy
306.36	Stone for Reclaimed Stabilized Base (if needed)	40	Tons
403.11	4" Machine Pave (50 gyr)	350	Tons
403.12	Hand Method Pave (50 gyr)	35	Tons
410.22	Tack Coat	1950	Sy
603	6-12" Plastic Drainage Pipe as directed	25	Lf
604.0007	Polyethylene Liner	2	Ea
604.22	Type B Drop Inlet	2	Ea
604.45	Adjust CB or MH Covers	6	Ea

611.90001	Adjusting Water Gates and Shutoffs	2	Ea
618.7	Flaggers	42	Hr
619	Maintenance of Traffic	0.1	Ls
632.3124	12" Thermoplastic Line	165	Lf
641	Loam & Seed	10	Cy
692	Mobilization	0.1	U
1010.2	Escalation	1	\$

MAPLEWOOD AVENUE

