

STATE OF NEW HAMPSHIRE  
DEPARTMENT OF NATURAL AND CULTURAL RESOURCES  
**DIVISION OF PARKS AND RECREATION**  
**CAPITAL PROJECTS & MAINTENANCE**

*SIDEWALK REPLACEMENT & CRACK SEALING*  
*HAMPTON BEACH STATE PARK HAMPTON, NH*

**SPECIFICATIONS**

**PROJECT # OPS-2424**



January 9, 2024



**STATE OF NEW HAMPSHIRE  
DEPARTMENT OF NATURAL AND CULTURAL RESOURCES  
DIVISION OF PARKS AND RECREATION  
CAPITAL PROJECTS & MAINTENANCE**

172 Pembroke Road  
Concord, NH 03301  
Tel. (603) 271-2606 Fax (603) 271-2629

**SPECIFICATIONS  
SIDEWALK REPLACEMENT & CRACK SEALING  
HAMPTON BEACH STATE PARK  
HAMPTON, NH**

**PROJECT # OPS-2424**

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**NOTICE TO BIDDERS**

Project: #OPS-2424 SIDEWALK REPLACEMENT & CRACK SEALING AT HAMPTON  
BEACH STATE PARK HAMPTON, NH

Sealed bid proposals for the above project will be accepted until 2:00 P.M., prevailing time, on Wednesday April 17, 2024. Proposals should be mailed to: Attn: Edward Mussey Public Works Project Manager I Department of Natural and Cultural Resources 172 Pembroke Road, Concord, NH 03301.

Specifications will be available to interested contractors at the Capital Projects & Maintenance Office on March 29, 2024. They may also be viewed at the following locations:

1. Construction Summary of New Hampshire Inc. 734 Chestnut Street, Manchester, NH 03104 Tel. (603) 627-8856.
2. Alpha Graphics 933 Islington Street, Portsmouth, NH 03801 Tel. (603) 436-3030
3. McGraw-Hill Construction Plan Room 34 Crosby Drive Suite 201 Bedford, MA, 03170 Tel. (781) 430-2006
4. Signature Digital Imaging, 472 Amherst St. Unit 23 Nashua, NH 03063 Tel. (603) 624-4025
5. Works in Progress, 20 Farrell Street, Suite 103, South Burlington, VT 05403 Tel. 1-800-669-7048
6. New Hampshire Department of Administrative Services Bureau of Purchase and Property Website <http://admin.state.nh.us/purchasing/vendorresources.asp>
7. New Hampshire State Parks Website <http://www.nhstateparks.org/partner-and-community-resources/rfps-and-projects.aspx>

All companies, corporations, and tradenames bidding must be registered and have a certificate of existence from the Secretary of State, Corporate Division (telephone 603-271-3244) in order to do business with the State of New Hampshire.

**All bidders will be required to attend the mandatory pre-bid conference at Hampton Beach State Park Hampton, NH. at 10:00 a.m. sharp, on Thursday April 11, 2024. Please contact Edward Mussey at 603-271-3973 or by e-mail [Edward.V.Mussey@dncr.nh.gov](mailto:Edward.V.Mussey@dncr.nh.gov) at least 24 hours prior to the bid conference if you will be attending.**

Bid Proposals must be made out on the forms provided in the specifications packet and submitted in a sealed envelope marked: "Bid Proposal": Sidewalk Replacement & Crack Sealing, Hampton Beach State Park, Project No. OPS-2424

---

Edward V Mussey  
Public Works Project Manager I



STATE OF NEW HAMPSHIRE  
DEPARTMENT OF NATURAL AND CULTURAL RESOURCES  
DIVISION OF PARKS AND RECREATION  
CAPITAL PROJECTS & MAINTENANCE

**PROPOSAL**

Proposal of...

---

(Bidders name)

---

(Bidders address)

To furnish and deliver all materials except as noted and to perform all work in accordance with the Contract of the State of New Hampshire, Department of Natural and Cultural Resources for the construction of...

Project #OPS-2424      Sidewalk Replacement & crack sealing Hampton Beach State Park, Hampton, NH.

Commissioner  
Department of Natural and Cultural Resources  
172 Pembroke Road  
Concord, N.H. 03301

Commissioner:

In accordance with the advertisement of the Department of NATURAL AND CULTURAL RESOURCES inviting proposals for the project herein before named and in conformity with the Plans and Specifications on file in the office of the Department of Natural and Cultural Resources, \_\_\_\_\_ (firm name) hereby certifies that \_\_\_\_\_ is/are the only person, or persons, interested in this proposal as principals; that this proposal is made without collusion with any person, firm, or corporation; that an examination has been made of the Plans, of the Standard Specifications, and Special Attentions, Supplemental Specifications, and Special Provisions, all of which are attached hereto, and also of the site of the work; and I, or we, propose to furnish all necessary machinery, equipment, tools, labor, and other means of construction, and to furnish all materials specified in the manner and at the time prescribed; and understand that the quantities of work as shown herein are approximate only and are subject to increase or decrease, and further understand that all quantities of work are to be performed at the quoted prices.

To execute the form of contract and begin work within 15 (fifteen) days after the notice to proceed has been received or otherwise delivered to the contractor and to prosecute said work until its completion.

**It is further proposed:**

To furnish a Surety bid bond in the amount of five percent (5%) of the lump sum bid, at the time of the bid opening as security for the completion of the contract in accordance with the plans and specifications and contract documents. The surety shall be acceptable to the Commissioner.

To furnish a Surety Performance and Payment contract bond in the amount of one hundred percent (100%) of the contract award, if the contract award is Seventy-five thousand dollars (\$75,000) or more, as security for the completion of the contract in accordance with the plans and specifications and contract documents. The surety shall be acceptable to the Commissioner. No Performance and Payment contract bond shall be required on contract awards of less than Seventy-five thousand dollars (\$75,000).

To guarantee all of the work performed under this contract to be done in accordance with the plans and specifications and contract documents.

The undersigned acknowledges receipt of the following addenda, issued during the bidding time, and states that these have been incorporated in the proposal:

Addendum #1 dated \_\_\_\_\_

Addendum #2 dated \_\_\_\_\_

Addendum #3 dated \_\_\_\_\_

Dated \_\_\_\_\_

**SCHEDULE OF VALUES PROJECT # OPS-2424**

**BIDDERS MUST INDICATE DOLLAR AMOUNT OF CONTRACT SUM ALLOCATED TO EACH CATEGORY OF WORK AS DESIGNATED BELOW: Failure to Complete This Table May Render your Bid Unresponsive.**

<b>Category</b>	<b>Quantity</b>	<b>Units</b>	<b>Unit Cost</b>	<b>Subtotal = (Quantity X Unit Cost)</b>
010000 General Conditions	1	Each		
00618 Uniformed Officers & Flaggers	1	Each		
00619 Maintenance of Traffic	1	Each		
02760 Hot Poured Crack Sealant	1080	Pounds		
311000 Site Clearing	1043	Square Yards		
321216 Asphalt Paving	1043	Square Yards		
031500 Expansion Joint Replacement (Self Expanding Cork) & 131100 Joint Sealants	7	Each		
Allowance #1	1	Each	\$25,000	\$25,000
<b>Total Lump Sum (Including All Allowances)</b>				

**ALLOWANCE #1: Unanticipated Modification and/or Additions to Contract Items:**

Include in the Contract, a stipulated sum/price of **\$25,000** for use upon the Project Managers instruction. This Allowance will make money available for modifications and/or additions to contract items due to owner-initiated changes, or for unknown, latent or differing existing conditions, or for the removal of hazardous materials that are encountered by construction.

- a. Contractor's costs for products, delivery, installation, labor, insurance, payroll, taxes, equipment rental, overhead and profit will be included in Change Orders authorizing expenditure of funds from this Allowance. The cost of the bond for the amount of Allowance shall be included as part of the lump sum base bid.
- b. Funds will be drawn from an Allowance only by Change Order. Contractor can proceed with Change Order Work against Allowance with direction from the Project Manager. The Contractor shall not proceed with any work that will exceed the amount of Allowance remaining.
- c. Credits can only be added to an Allowance by Alteration Order. The Contractor may not use a credit until an Alteration Order is fully executed.
- d. Notwithstanding the Contractors objection, the Project Manager may at any time reduce the funds remaining in the Allowance by Alteration Order.
- e. At Final Payment of the Contract, funds remaining in the Allowance will be credited to the State.

**Total Lump Sum of Contract (Including All Allowances).....**

**NOTE:** The Schedule of values must be completely filled out for the bid to be considered responsive.



**SIGNATURE PAGE**

Company Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

Fax \_\_\_\_\_

Email Address \_\_\_\_\_

Signature of Authorized Bidder \_\_\_\_\_

Print \_\_\_\_\_

Title \_\_\_\_\_

Address of Bidder \_\_\_\_\_

(if different than company)

Names and Addresses of Members of the Firm/Corporation

Name \_\_\_\_\_ address \_\_\_\_\_

Name \_\_\_\_\_ address \_\_\_\_\_

Name \_\_\_\_\_ address \_\_\_\_\_



Notice: This agreement and all of its attachments shall become public upon submission to Governor and Executive Council for approval. Any information that is private, confidential or proprietary must be clearly identified to the agency and agreed to in writing prior to signing the contract.

**AGREEMENT**

The State of New Hampshire and the Contractor hereby mutually agree as follows:

**GENERAL PROVISIONS**

**1. IDENTIFICATION.**

1.1 State Agency Name Department of Natural and Cultural Resources		1.2 State Agency Address 172 Pembroke Rd. Concord, NH 03301	
1.3 Contractor Name		1.4 Contractor Address	
1.5 Contractor Phone Number	1.6 Account Unit and Class	1.7 Completion Date	1.8 Price Limitation
1.9 Contracting Officer for State Agency Edward Mussey, Public Works Project manager I		1.10 State Agency Telephone Number 603-271-3973	
1.11 Contractor Signature  <div style="text-align: right;">Date:</div>		1.12 Name and Title of Contractor Signatory	
1.13 State Agency Signature  <div style="text-align: right;">Date:</div>		1.14 Name and Title of State Agency Signatory	
1.15 Approval by the N.H. Department of Administration, Division of Personnel <i>(if applicable)</i>  By: _____ Director, On: _____			
1.16 Approval by the Attorney General (Form, Substance and Execution) <i>(if applicable)</i>  By: _____ On: _____			
1.17 Approval by the Governor and Executive Council <i>(if applicable)</i>  G&C Item number: _____ G&C Meeting Date: _____			

**2. SERVICES TO BE PERFORMED.** The State of New Hampshire, acting through the agency identified in block 1.1 (“State”), engages contractor identified in block 1.3 (“Contractor”) to perform, and the Contractor shall perform, the work or sale of goods, or both, identified and more particularly described in the attached EXHIBIT B which is incorporated herein by reference (“Services”).

**3. EFFECTIVE DATE/COMPLETION OF SERVICES.**

3.1 Notwithstanding any provision of this Agreement to the contrary, and subject to the approval of the Governor and Executive Council of the State of New Hampshire, if applicable, this Agreement, and all obligations of the parties hereunder, shall become effective on the date the Governor and Executive Council approve this Agreement, unless no such approval is required, in which case the Agreement shall become effective on the date the Agreement is signed by the State Agency as shown in block 1.13 (“Effective Date”).

3.2 If the Contractor commences the Services prior to the Effective Date, all Services performed by the Contractor prior to the Effective Date shall be performed at the sole risk of the Contractor, and in the event that this Agreement does not become effective, the State shall have no liability to the Contractor, including without limitation, any obligation to pay the Contractor for any costs incurred or Services performed.

3.3 Contractor must complete all Services by the Completion Date specified in block 1.7.

**4. CONDITIONAL NATURE OF AGREEMENT.**

Notwithstanding any provision of this Agreement to the contrary, all obligations of the State hereunder, including, without limitation, the continuance of payments hereunder, are contingent upon the availability and continued appropriation of funds. In no event shall the State be liable for any payments hereunder in excess of such available appropriated funds. In the event of a reduction or termination of appropriated funds by any state or federal legislative or executive action that reduces, eliminates or otherwise modifies the appropriation or availability of funding for this Agreement and the Scope for Services provided in EXHIBIT B, in whole or in part, the State shall have the right to withhold payment until such funds become available, if ever, and shall have the right to reduce or terminate the Services under this Agreement immediately upon giving the Contractor notice of such reduction or termination. The State shall not be required to transfer funds from any other account or source to the Account identified in block 1.6 in the event funds in that Account are reduced or unavailable.

**5. CONTRACT PRICE/PRICE LIMITATION/ PAYMENT.**

5.1 The contract price, method of payment, and terms of payment are identified and more particularly described in EXHIBIT C which is incorporated herein by reference.

5.2 Notwithstanding any provision in this Agreement to the contrary, and notwithstanding unexpected circumstances, in no event shall the total of all payments authorized, or actually made hereunder, exceed the Price Limitation set forth in block 1.8. The payment by the State of the contract price shall be the only and the complete reimbursement to the Contractor for all expenses, of whatever nature incurred by the Contractor in the performance

hereof, and shall be the only and the complete compensation to the Contractor for the Services.

5.3 The State reserves the right to offset from any amounts otherwise payable to the Contractor under this Agreement those liquidated amounts required or permitted by N.H. RSA 80:7 through RSA 80:7-c or any other provision of law.

5.4 The State’s liability under this Agreement shall be limited to monetary damages not to exceed the total fees paid. The Contractor agrees that it has an adequate remedy at law for any breach of this Agreement by the State and hereby waives any right to specific performance or other equitable remedies against the State.

**6. COMPLIANCE BY CONTRACTOR WITH LAWS AND REGULATIONS/EQUAL EMPLOYMENT OPPORTUNITY.**

6.1 In connection with the performance of the Services, the Contractor shall comply with all applicable statutes, laws, regulations, and orders of federal, state, county or municipal authorities which impose any obligation or duty upon the Contractor, including, but not limited to, civil rights and equal employment opportunity laws and the Governor’s order on Respect and Civility in the Workplace, Executive order 2020-01. In addition, if this Agreement is funded in any part by monies of the United States, the Contractor shall comply with all federal executive orders, rules, regulations and statutes, and with any rules, regulations and guidelines as the State or the United States issue to implement these regulations. The Contractor shall also comply with all applicable intellectual property laws.

6.2 During the term of this Agreement, the Contractor shall not discriminate against employees or applicants for employment because of age, sex, sexual orientation, race, color, marital status, physical or mental disability, religious creed, national origin, gender identity, or gender expression, and will take affirmative action to prevent such discrimination, unless exempt by state or federal law. The Contractor shall ensure any subcontractors comply with these nondiscrimination requirements.

6.3 No payments or transfers of value by Contractor or its representatives in connection with this Agreement have or shall be made which have the purpose or effect of public or commercial bribery, or acceptance of or acquiescence in extortion, kickbacks, or other unlawful or improper means of obtaining business.

6.4. The Contractor agrees to permit the State or United States access to any of the Contractor’s books, records and accounts for the purpose of ascertaining compliance with this Agreement and all rules, regulations and orders pertaining to the covenants, terms and conditions of this Agreement.

**7. PERSONNEL.**

7.1 The Contractor shall at its own expense provide all personnel necessary to perform the Services. The Contractor warrants that all personnel engaged in the Services shall be qualified to perform the Services, and shall be properly licensed and otherwise authorized to do so under all applicable laws.

7.2 The Contracting Officer specified in block 1.9, or any successor, shall be the State’s point of contact pertaining to this Agreement.

**8. EVENT OF DEFAULT/REMEDIES.**

8.1 Any one or more of the following acts or omissions of the Contractor shall constitute an event of default hereunder (“Event of Default”):

- 8.1.1 failure to perform the Services satisfactorily or on schedule;
- 8.1.2 failure to submit any report required hereunder; and/or
- 8.1.3 failure to perform any other covenant, term or condition of this Agreement.

8.2 Upon the occurrence of any Event of Default, the State may take any one, or more, or all, of the following actions:

8.2.1 give the Contractor a written notice specifying the Event of Default and requiring it to be remedied within, in the absence of a greater or lesser specification of time, thirty (30) calendar days from the date of the notice; and if the Event of Default is not timely cured, terminate this Agreement, effective two (2) calendar days after giving the Contractor notice of termination;

8.2.2 give the Contractor a written notice specifying the Event of Default and suspending all payments to be made under this Agreement and ordering that the portion of the contract price which would otherwise accrue to the Contractor during the period from the date of such notice until such time as the State determines that the Contractor has cured the Event of Default shall never be paid to the Contractor;

8.2.3 give the Contractor a written notice specifying the Event of Default and set off against any other obligations the State may owe to the Contractor any damages the State suffers by reason of any Event of Default; and/or

8.2.4 give the Contractor a written notice specifying the Event of Default, treat the Agreement as breached, terminate the Agreement and pursue any of its remedies at law or in equity, or both.

**9. TERMINATION.**

9.1 Notwithstanding paragraph 8, the State may, at its sole discretion, terminate the Agreement for any reason, in whole or in part, by thirty (30) calendar days written notice to the Contractor that the State is exercising its option to terminate the Agreement.

9.2 In the event of an early termination of this Agreement for any reason other than the completion of the Services, the Contractor shall, at the State’s discretion, deliver to the Contracting Officer, not later than fifteen (15) calendar days after the date of termination, a report (“Termination Report”) describing in detail all Services performed, and the contract price earned, to and including the date of termination. In addition, at the State’s discretion, the Contractor shall, within fifteen (15) calendar days of notice of early termination, develop and submit to the State a transition plan for Services under the Agreement.

**10. PROPERTY OWNERSHIP/DISCLOSURE.**

10.1 As used in this Agreement, the word “Property” shall mean all data, information and things developed or obtained during the performance of, or acquired or developed by reason of, this Agreement, including, but not limited to, all studies, reports, files, formulae, surveys, maps, charts, sound recordings, video recordings, pictorial reproductions, drawings, analyses, graphic representations, computer programs, computer printouts, notes, letters, memoranda, papers, and documents, all whether finished or unfinished.

10.2 All data and any Property which has been received from the State, or purchased with funds provided for that purpose under this Agreement, shall be the property of the State, and shall be returned to the State upon demand or upon termination of this Agreement for any reason.

10.3 Disclosure of data, information and other records shall be governed by N.H. RSA chapter 91-A and/or other applicable law. Disclosure requires prior written approval of the State.

**11. CONTRACTOR’S RELATION TO THE STATE.** In the performance of this Agreement the Contractor is in all respects an independent contractor, and is neither an agent nor an employee of the State. Neither the Contractor nor any of its officers, employees, agents or members shall have authority to bind the State or receive any benefits, workers’ compensation or other emoluments provided by the State to its employees.

**12. ASSIGNMENT/DELEGATION/SUBCONTRACTS.**

12.1 Contractor shall provide the State written notice at least fifteen (15) calendar days before any proposed assignment, delegation, or other transfer of any interest in this Agreement. No such assignment, delegation, or other transfer shall be effective without the written consent of the State.

12.2 For purposes of paragraph 12, a Change of Control shall constitute assignment. “Change of Control” means (a) merger, consolidation, or a transaction or series of related transactions in which a third party, together with its affiliates, becomes the direct or indirect owner of fifty percent (50%) or more of the voting shares or similar equity interests, or combined voting power of the Contractor, or (b) the sale of all or substantially all of the assets of the Contractor.

12.3 None of the Services shall be subcontracted by the Contractor without prior written notice and consent of the State.

12.4 The State is entitled to copies of all subcontracts and assignment agreements and shall not be bound by any provisions contained in a subcontract or an assignment agreement to which it is not a party.

**13. INDEMNIFICATION.** The Contractor shall indemnify, defend, and hold harmless the State, its officers, and employees from and against all actions, claims, damages, demands, judgments, fines, liabilities, losses, and other expenses, including, without limitation, reasonable attorneys’ fees, arising out of or relating to this Agreement directly or indirectly arising from death, personal injury, property damage, intellectual property infringement, or other claims asserted against the State, its officers, or employees caused by the acts or omissions of negligence, reckless or willful misconduct, or fraud by the Contractor, its employees, agents, or subcontractors. The State shall not be liable for any costs incurred by the Contractor arising under this paragraph 13. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the State’s sovereign immunity, which immunity is hereby reserved to the State. This covenant in paragraph 13 shall survive the termination of this Agreement.

**14. INSURANCE.**

14.1 The Contractor shall, at its sole expense, obtain and continuously maintain in force, and shall require any subcontractor or assignee to obtain and maintain in force, the following insurance:

14.1.1 commercial general liability insurance against all claims of bodily injury, death or property damage, in amounts of not less than \$1,000,000 per occurrence and \$2,000,000 aggregate or excess; and

14.1.2 special cause of loss coverage form covering all Property subject to subparagraph 10.2 herein, in an amount not less than 80% of the whole replacement value of the Property.

14.2 The policies described in subparagraph 14.1 herein shall be on policy forms and endorsements approved for use in the State of New Hampshire by the N.H. Department of Insurance, and issued by insurers licensed in the State of New Hampshire.

14.3 The Contractor shall furnish to the Contracting Officer identified in block 1.9, or any successor, a certificate(s) of insurance for all insurance required under this Agreement. At the request of the Contracting Officer, or any successor, the Contractor shall provide certificate(s) of insurance for all renewal(s) of insurance required under this Agreement. The certificate(s) of insurance and any renewals thereof shall be attached and are incorporated herein by reference.

**15. WORKERS' COMPENSATION.**

15.1 By signing this agreement, the Contractor agrees, certifies and warrants that the Contractor is in compliance with or exempt from, the requirements of N.H. RSA chapter 281-A ("*Workers' Compensation*").

15.2 To the extent the Contractor is subject to the requirements of N.H. RSA chapter 281-A, Contractor shall maintain, and require any subcontractor or assignee to secure and maintain, payment of Workers' Compensation in connection with activities which the person proposes to undertake pursuant to this Agreement. The Contractor shall furnish the Contracting Officer identified in block 1.9, or any successor, proof of Workers' Compensation in the manner described in N.H. RSA chapter 281-A and any applicable renewal(s) thereof, which shall be attached and are incorporated herein by reference. The State shall not be responsible for payment of any Workers' Compensation premiums or for any other claim or benefit for Contractor, or any subcontractor or employee of Contractor, which might arise under applicable State of New Hampshire Workers' Compensation laws in connection with the performance of the Services under this Agreement.

**16. WAIVER OF BREACH.** A State's failure to enforce its rights with respect to any single or continuing breach of this Agreement shall not act as a waiver of the right of the State to later enforce any such rights or to enforce any other or any subsequent breach.

**17. NOTICE.** Any notice by a party hereto to the other party shall be deemed to have been duly delivered or given at the time of mailing by certified mail, postage prepaid, in a United States Post Office addressed to the parties at the addresses given in blocks 1.2 and 1.4, herein.

**18. AMENDMENT.** This Agreement may be amended, waived or discharged only by an instrument in writing signed by the parties hereto and only after approval of such amendment, waiver or discharge by the Governor and Executive Council of the State of New Hampshire unless no such approval is required under the circumstances pursuant to State law, rule or policy.

**19. CHOICE OF LAW AND FORUM.**

19.1 This Agreement shall be governed, interpreted and construed in accordance with the laws of the State of New Hampshire except where the Federal supremacy clause requires otherwise. The wording used in this Agreement is the wording chosen by the parties to express their mutual intent, and no rule of construction shall be applied against or in favor of any party.

19.2 Any actions arising out of this Agreement, including the breach or alleged breach thereof, may not be submitted to binding arbitration, but must, instead, be brought and maintained in the Merrimack County Superior Court of New Hampshire which shall have exclusive jurisdiction thereof.

**20. CONFLICTING TERMS.** In the event of a conflict between the terms of this P-37 form (as modified in EXHIBIT A) and any other portion of this Agreement including any attachments thereto, the terms of the P-37 (as modified in EXHIBIT A) shall control.

**21. THIRD PARTIES.** This Agreement is being entered into for the sole benefit of the parties hereto, and nothing herein, express or implied, is intended to or will confer any legal or equitable right, benefit, or remedy of any nature upon any other person.

**22. HEADINGS.** The headings throughout the Agreement are for reference purposes only, and the words contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction or meaning of the provisions of this Agreement.

**23. SPECIAL PROVISIONS.** Additional or modifying provisions set forth in the attached EXHIBIT A are incorporated herein by reference.

**24. FURTHER ASSURANCES.** The Contractor, along with its agents and affiliates, shall, at its own cost and expense, execute any additional documents and take such further actions as may be reasonably required to carry out the provisions of this Agreement and give effect to the transactions contemplated hereby.

**25. SEVERABILITY.** In the event any of the provisions of this Agreement are held by a court of competent jurisdiction to be contrary to any state or federal law, the remaining provisions of this Agreement will remain in full force and effect.

**26. ENTIRE AGREEMENT.** This Agreement, which may be executed in a number of counterparts, each of which shall be deemed an original, constitutes the entire agreement and understanding between the parties, and supersedes all prior agreements and understandings with respect to the subject matter hereof.

## GENERAL CONDITIONS

### GENERAL

This contract is to be governed by all the applicable provisions of these specifications.

This project consists of removing existing Guardrail and Installing new Guardrail, at Hampton Beach State Park, Hampton NH, as indicated on the attached plans and these specifications.

### BIDDING REQUIREMENTS

Bids shall only be accepted on the official Bid Proposal Forms, attached to these specifications. **Any bids submitted that are not on the official bid proposal forms will not be accepted.**

### CONDITIONS AT SITE OR BUILDING

Bidders shall visit the site and be responsible for having ascertained pertinent local conditions such as: location, accessibility, general character of the site or building, the character and extent of existing work within or adjacent to the site, and any other work being performed thereon at the time of the submission of this bid.

### PERFORMANCE AND PAYMENT BOND

In the event the bid is \$75,000 or more, the contractor shall furnish security by bond or otherwise in an amount equal to 100% of the contract guaranteeing performance and payment. The payment security shall meet the requirements of RSA 447:16.

The performance and payment bond must be returned with the signed contract within 15 days after the contract has been mailed or otherwise delivered to the bidder.

### PROPOSAL GUARANTEE

Contractors shall furnish a bid bond in an amount equal to 5% of the lump sum bid. The security shall meet the requirements of RSA 447:16

### BUILDING PERMIT REQUIRED

NOT REQUIRED

### RIGHT TO WORK IN N.H.

**All bidders must be registered and have a certificate of existence from the New Hampshire Secretary of State, Corporate Division (telephone 603-271-3244) in order to do business with the State of New Hampshire.**

## **PROPOSAL SELECTION**

In most cases the proposal submitted by the qualified bidder with the lowest base bid price shall be selected. However, the Department of Natural and Cultural Resources reserves the right to reject any or all proposals, or advertise for new proposals as it judges to be in the best interest of the state.

## **CONTRACTORS QUALIFICATIONS**

The successful bidder shall provide evidence upon request that they have been in the Guardrail Installation business successfully performing this type, scale, and quality of work for a minimum of five years. At the request of the Project Manager, a comprehensive list of all projects worked on involving Guardrail work in the past two years by the contractor shall be submitted with references.

## **EXECUTION OF CONTRACT**

The Contractor's attention is called to the following:

**EXECUTION AND APPROVAL OF CONTRACT.** The contract shall be signed by the successful Bidder and returned, together with the contract bond, if applicable, within 15 days after the contract has been mailed or otherwise delivered to the Bidder. No contract shall be considered as in effect until it has been fully executed by all the parties thereto and, when the contract amount is more than \$10,000, the award has been concurred in by the Governor and Council.

**FAILURE TO EXECUTE CONTRACT.** Failure to execute the contract within 15 days after the contract has been mailed or otherwise delivered to the successful Bidder shall be just cause for the cancellation of the award. Award may then be made to the next lowest Bidder, or the work may be re-advertised as the Commissioner may decide.

## **STARTING DATE**

The Contractor shall start work after notice to proceed is received. The notice to proceed shall be issued immediately upon contract approval by the Governor and Council, and shall establish the actual construction start date. Failure to start work within 15 calendar days after the start date shall be considered a default of the contract. If the actual start date is later than the advertised start date, the completion date shall be extended by an equivalent number of working days.



## WORKSITE ACCOUNTABILITY

Per RSA 21-I:81-b At the onset of work on any state construction project, the general contractor or designated project construction manager, if any, shall provide to the Department Project Manager a current list of all subcontractors and independent contractors that the general contractor has agreed to use on the job site, with a record of the entity to whom that subcontractor is insured for worker's compensation purposes. This list shall be posted on the jobsite and updated as needed to reflect any new subcontractors or independent contractors.

If it is determined that a subcontractor or independent contractor is present on a state construction site without the contractor's name and direct contracting relationship being posted in a visible location at the worksite, the general contractor or designated project manager shall require the subcontractor or independent contractor to provide the information within 36 hours and to post the information in a visible location at the worksite. If the information is not provided within 36 hours of its request, the general contractor shall suspend the contractor until the information is provided and posted.

## PROTECTION OF EXISTING PROPERTY

It shall be the responsibility of the contractor to protect existing property from damage. Any damage caused by the contractor in the performance of the work shall be repaired or replaced at his expense to the satisfaction of the Department Project Manager.

## CODES

All work performed shall meet the provisions, if applicable, of the 2018 IBC, and any local codes that may apply.

## WORKMANSHIP

All work shall be performed in a neat workmanlike manner by skilled workmen who have been actively engaged in performing the type of work specified under this contract for the last two years.

## CLEAN-UP

All debris from the project shall be cleaned up daily and removed from the site at least on a weekly basis.

## DEFAULT AND TERMINATION OF CONTRACT

If the Contractor...

- (a) Fails to begin the work under the contract within the time specified in the contract, or
- (b) Fails to perform the work with sufficient workmen and equipment or with sufficient materials to assure the prompt completion of said work, or
- (c) Performs the work unsuitably or neglects or refuses to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable, or
- (d) Discontinues the prosecution of work, or
- (e) Fails to resume work which has been discontinued, within reasonable time after notice to do so, or
- (f) Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency, or
- (g) Makes an assignment for the benefit of creditors, or
- (h) For any other cause whatsoever, fails to carry on the work in an acceptable manner...

The Commissioner will give notice in writing to the Contractor of such delay, neglect, or default.

If the Contractor or Surety does not proceed in accordance with the Notice, then the Commissioner will, upon written notification from the Project Manager of the fact of such delay, neglect or default, and the Contractor's failure to comply with such notice, have full power and authority without violating the contract, to take the prosecution of the work out of the hands of the Contractor. The Commissioner may enter into an agreement for the completion of said contract according to the terms and conditions thereof, or use such other methods as in his opinion will be required for the completion of said contract in an acceptable manner.

All extra costs and charges incurred by the Department as a result of such delay, neglect or default, together with the cost of completion of the work under the contract will be deducted from any monies due or which may become due said Contractor. If such expenses exceed the sum which would have been payable under the contract, then the Contractor and the Surety shall be liable and shall pay to the Department, the amount of such excess.

## FAILURE TO COMPLETE THE WORK ON TIME

If the Contractor fails to complete all of the work or sections of the Project, within the time specified in the Contract, the sum given in the schedule that follows will be deducted from any money due the Contractor. This deduction will be made, not as a penalty, but as fixed, agreed liquidation damages for inconvenience to the State and for reimbursing the Department the cost of the Administration of the Contract, including engineering and inspection. Should the amount of money otherwise due the Contractor be less than the amount of such liquidated damages, the Contractor and his Surety shall be liable to the State for such deficiency.

Permitting the Contractor to continue and finish the work after the time fixed for its completion, shall in no way obligate the State to waive any of its rights under the Contract.

When the final acceptance has been duly made by the Project Manager, any liquidated damage charges shall end.

The fixed, agreed, liquidated damages shall be assessed in accordance with the following schedule.

<u>ORIGINAL CONTRACT AMOUNT</u>	<u>AMOUNT OF LIQUIDATED DAMAGES</u>	<u>PER WORKING DAY</u>
From more than:	to and including:	
0.	25,000.	\$ 200.00
25,000.	50,000.	\$ 300.00
50,000.	100,000.	\$ 400.00
100,000.	500,000.	\$ 500.00

## **SUBSTANTIAL COMPLETION & FINAL INSPECTION**

When the work is substantially complete, the Contractor shall submit to the Project Manager, a list of items of work to be completed or corrected. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all work in accordance with the Contract Documents. On the basis of an inspection by the Project Manager which determines that the work is substantially complete, a Certificate of Substantial Completion shall establish the date of substantial completion and state the responsibilities for any damage to the work and insurance, and fix the time limit within which the Contractor shall complete the items listed herein. Warranties required by the Contract documents shall commence on the date of Substantial Completion unless otherwise provided in the Certificate of Substantial Completion.

If the Contractor fails to proceed to complete the items on the "punch list", then in addition to the corrective measures listed in the Certificate of Substantial Completion, the Commissioner may use the monies still due the Contractor to have such items completed and the Contractor shall lose any claim to the monies used.

Upon written notice that the Work is ready for final inspection and acceptance, the Project manager shall promptly make such inspection, and when he finds the Work acceptable under the Contract documents and the Contract fully performed, a Certificate of Final Payment will be issued.

Final inspection will be made by the Project Manager. Incomplete items necessary to complete the project, shall be completed prior to final payment. The completion date for this project is June 30, 2024.

## GUARANTEE OF WORK

- a) Except as otherwise specified, all work shall be guaranteed by the Contractor against defects resulting from the use of inferior materials, equipment or workmanship for two years from the date of substantial completion of the work.
  
- b) If, within any guarantee period, repairs or changes are required in connection with guaranteed work, which in the opinion of the Project Manager, is rendered necessary as a result of the use of materials, equipment or workmanship which are inferior, defective, or not in accordance with the terms of the Contract, the Contractor shall, promptly upon receipt of notice from the Commissioner, and at his own expense:
  - 1) Place in satisfactory condition in every particular, all of such guaranteed work, correct all defects therein, and...
  
  - 2) Make good all damage to the building or site, or equipment or contents thereof, which in the opinion of the Project Manager, is the result of the use of materials, equipment or workmanship which are inferior, defective, or not in accordance with the terms of the Contract, and...
  
  - 3) Make good any work or material, or the equipment and contents of said building or site disturbed in fulfilling any such guarantee.
  
- c) In any case, wherein fulfilling the requirements of the Contract or of any guarantee, embraced in or required thereby, the Contractor disturbs any work guaranteed under another contract, he shall restore such disturbed work to a condition satisfactory to the Project Manager and guarantee such restored work to the same extent as it was guaranteed under such other contracts.
  
- d) If the Contractor, after notice, fails to proceed promptly to comply with the terms of the guarantee, the Commissioner may have the defects corrected and the Contractor and his Surety shall be liable for all expense incurred.
  
- e) All special guarantees applicable to definite parts of the work that may be stipulated in the specifications or other papers forming a part of the Contract shall be subject to the terms of this paragraph during the first year of the life of such special guarantee.

## **PROSECUTION OF WORK**

Upon starting the work within the 15 days set forth by this contract, the Contractor shall prosecute the work a minimum of 8 hours daily per working day until completion, excluding breakdowns or inclement weather. If the Contractor finds it impossible to start the work as stated above, he may make a written request to the Project Manager for an extension of time. Any such request shall be made prior to expiration of the allowable 15 days, and shall contain reasons which the Contractor believes will justify the granting of his request. In his request, the Contractor shall submit his proposed starting date.

## **CHANGES IN THE WORK**

The Project Manager may at any time, by a written order, and without notice to the Sureties, make changes in the Drawings and Specifications and completion date of this contract and within the general scope thereof.

In making any change, the additional cost or credit for the change shall be determined as follows:

- The order shall stipulate the mutually agreed upon lump sum price which shall be added to or deducted from the contract price. The contractor shall furnish an itemized breakdown of the prices used in computing the value of any change that might be ordered.
- If the price change is an addition to the contract price and the work is performed by the general contractor and not a subcontractor, it shall include the contractor's indirect costs as follows: Workmen's Compensation and Employee Liability, Unemployment and Social Security Taxes.
- In addition to the above indirect costs, the general contractor shall be allowed a markup not to exceed ten percent (10%). Said ten percent (10%) shall be all inclusive for overhead, supervision, and profit. In addition to this, an allowance shall be made for performance and payment bond additional premium.
- If the price change is an addition to the contract price and involves the work of the general contractor and subcontractor, the general contractor would be allowed ten percent (10%) on that part of the work performed by him and five percent (5%) on that part of the work performed by the subcontractor. The same percentages shall apply to subcontractors.
- On any change which involves a net credit to the Owner, no allowance for overhead and profit shall be figured.

## INSURANCE REQUIREMENTS

**No operations under this contract shall commence unless and until certification of insurance attesting to the below listed requirements have been filed with the Commissioner, approved by the Attorney General, and the Contract approved by the Governor and Council and a Notice to Proceed is issued.**

Insurance requirements by paragraphs 1-4 below shall be the responsibility of the Prime Contractor. The Prime Contractor, at his discretion, may make similar requests of any subcontractor.

Following is the summary of minimum insurance requirements:

1. Workmen's Compensation Insurance (In accordance with RSA 281-A.)
  - a. Employers' Liability
    - 1.) \$100,000 each accident
    - 2.) \$500,000 Disease-policy limit
    - 3.) \$100,000 Disease-each employee
  
2. Commercial General Liability Insurance: Occurrence Form Policy: Include full Contractual Liability (see Indemnification Clause 9)., Explosion, Collapse, and Underground coverage's:
  - a. Limits of Liability:
    - 1.) \$1,000,000 Each Occurrence Bodily injury & Property Damage.
    - 2.) \$2,000,000 General Aggregate-Include per Project Aggregate Endorsement.
    - 3.) \$2,000,000 Products/Completed Operations Aggregate.
    - 4.) State shall be named as an additional named insured.
  
3. If blasting and/or demolition is required by the Contract, the Contractor or subcontractor shall obtain the respective coverage for those activities, and shall furnish to the Commissioner a certificate of Insurance evidencing the required coverage's prior to commencement of any operations involving blasting and/or demolition.
  
4. Owner's Protective Liability coverage for the benefit of the State of New Hampshire Department of NATURAL AND CULTURAL RESOURCES.
  - a. Limits of Liability:
    - 1.) \$2,000,000 Each Occurrence
    - 2.) \$3,000,000 Aggregate
  
5. Commercial Automobile Liability covering all motor vehicles including owned, hired, borrowed, and non-owned vehicles.
  - a. Limits of Liability:
    - 1.) \$1,000,000 Combined Single Limit for Bodily injury & Property Damage
  
6. Commercial Umbrella Liability
  - a. Limits of Liability:
    - 1.) \$1,000,000 Each Occurrence
    - 2.) 1,000,000 Aggregate

7. Builder's Risk Insurance (Fire and Extended Coverage): (NOT REQUIRED FOR THIS CONTRACT)

The Contractor shall insure the work included in the Contract, including extras and change orders, on an "All Risk" basis, on a one hundred percent (100%) completed value basis of the Contract, as modified. Builder's Risk coverage shall include materials located at the Contractor's premises, on-site, in-transit, and at any temporary site. The policy by its own terms or by endorsement shall specifically permit partial or beneficiary occupancy prior to completion or acceptance of the entire work. The policies shall be in the names of the State of New Hampshire Department of Natural and Cultural Resources and the Contractor. The policies shall provide for the inclusion of the names of all other Contractors, Subcontractors, and others employed on the premises as insureds. The policies shall stipulate that the insurance companies shall have no right of subrogation against any Contractors, Subcontractors or other parties employed on the premises.

8. General Insurance Conditions

a. Each policy shall contain a clause prohibiting cancellation or modifications of the policy earlier than thirty (30) days or ten (10) in cases of non-payment of premium after written notice thereof has been received by the State.

9. Indemnification:

a. The Contractor shall indemnify, defend, and hold harmless the State of New Hampshire, its Agencies, and its agents and employees from and against any and all claims, liabilities, suits or penalties arising out of (or which may be claimed to arise out of) acts of omissions of the Contractor or subcontractors in the performance of work covered by the Contract. This covenant shall survive the termination of the Contract. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State, which immunity is hereby reserved by the State.

**NOTE:**

In articles 1 - 14 of the General Conditions references to "the Project Manager" shall be understood to mean the Department Project Manager designated by the Capital Project & Maintenance office of the New Hampshire Department of Natural and Cultural Resources.





**BUSINESS NAME/ADDRESS LOCATION**

Legal Entity Name: \_\_\_\_\_

Doing Business As Name: \_\_\_\_\_

Payment Address: \_\_\_\_\_

City/Town: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_ COUNTRY: \_\_\_\_\_

Business Address: \_\_\_\_\_

City/Town: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_ COUNTRY: \_\_\_\_\_

Telephone #: \_\_\_\_\_ Cell Phone #: \_\_\_\_\_ FAX #: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Website: \_\_\_\_\_ E-Mail (Main Office): \_\_\_\_\_

Electronic Payment Option: Please contact Treasury at [ACHProcessing@treasury.nh.gov](mailto:ACHProcessing@treasury.nh.gov) or visit their website at [Department of Treasury](http://Department of Treasury) for further information on this option. Registration as a vendor must be completed prior to contacting.

**TYPE OF BUSINESS**

(Note: Registration with the NH Secretary of State MUST be done prior to the awarding of any contracts) [Secretary of State Corporate Division Registration](http://Secretary of State Corporate Division Registration) (603) 271-3244

Registered with NH Secretary of State? YES \_\_\_ NO \_\_\_ State Incorporated In: \_\_\_\_\_

DUNS #: \_\_\_\_\_

Select the appropriate designations for your Entity:

Minority Institutions	<input type="checkbox"/>	Minority Owned Large Business	<input type="checkbox"/>	Minority Owned Small Business	<input type="checkbox"/>
Disabled Veteran Business	<input type="checkbox"/>	Svs Disabled Veteran Owned	<input type="checkbox"/>	Veteran Owned Small Business	<input type="checkbox"/>
Physically Challenged Bus	<input type="checkbox"/>	SBA Cert Fin Disadvantaged Bus	<input type="checkbox"/>	SBA Cert Hist Underutilized Bus	<input type="checkbox"/>
Historically Black Colleges	<input type="checkbox"/>	Women Owned Sm Bus	<input type="checkbox"/>	Women Owned Large Businesses	<input type="checkbox"/>
Small Business	<input type="checkbox"/>	SBA Cert Sm Disadvantaged Bus	<input type="checkbox"/>		

**SIGNATURE BLOCK**

I certify the above information to be correct and grant authorization to the State of New Hampshire to investigate any and all facts contained therein, including facility visitation.

Name and Title (print or type): \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**RETURN ADDRESS**

(Phone) 603-271-2201  
(Fax) 603-271-2700  
[prch.web@das.nh.gov](mailto:prch.web@das.nh.gov)  
<http://das.nh.gov/purchasing>

DIVISION OF PROCUREMENT & SUPPORT SERVICES  
BUREAU OF PURCHASE AND PROPERTY  
STATE HOUSE ANNEX, ROOM 102  
25 CAPITOL STREET  
CONCORD NH 03301-6398



### STATE OF NEW HAMPSHIRE ALTERNATE W-9 FORM

PLEASE USE THIS FORM TO PROVIDE THE REQUESTED INFORMATION

Pursuant to IRS Regulations, you must furnish your Taxpayer Identification Number (TIN) to the State whether or not you are required to file tax returns. If this number is not provided, you may be subject to a 24% withholding on each payment made to you. To avoid this 24% withholding & to ensure that accurate tax information is reported to the IRS, A RESPONSE IS REQUIRED.

Legal Entity Name: \_\_\_\_\_

Doing Business As Name: \_\_\_\_\_

Payment Address: \_\_\_\_\_

City/Town: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_ COUNTRY: \_\_\_\_\_

Business Address: \_\_\_\_\_

City/Town: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_ COUNTRY: \_\_\_\_\_

Telephone #: \_\_\_\_\_ Cell Phone #: \_\_\_\_\_ FAX #: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Website: \_\_\_\_\_ E-Mail (Main Office): \_\_\_\_\_

TAXPAYER IDENTIFICATION NUMBER (TIN) as used on IRS tax return

Social Security # (SSN): \_\_\_\_\_ Fed ID # (EIN/FIN): \_\_\_\_\_

#### PRINCIPAL ACTIVITY

Service Provider       Product/Merchandise Provider       Other Provider

List the principal type of service, product or other that is provided: \_\_\_\_\_

Medical/Health Care Services       Legal Services       1099 Grant Reportable

DESIGNATION (select ONLY THOSE which apply to you/your organization as provided to the IRS)

Individual/Sole-Proprietor       Corporation (S)       Government  
 Single Member LLC  
 LLC (C Corporation)       Corporation (C)       Travel/Intern  
 LLC (S Corporation)       Partnership       Refund/Reimbursement  
 LLC (P Partnership)       Estate or Trust       Tax-Exempt

EXEMPTIONS: \_\_\_\_\_ Exemption from FATCA reporting: \_\_\_\_\_

*Under penalty of perjury, I declare that the information provided is true, correct & complete, to the best of my knowledge & belief.*

NAME & TITLE (print or type): \_\_\_\_\_

TELEPHONE #: \_\_\_\_\_ CELL PHONE #: \_\_\_\_\_ FAX #: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

E-Mail (Main Office): \_\_\_\_\_ Website: \_\_\_\_\_

PLEASE RETURN WHEN COMPLETED TO:

Email: PRCH.WEB@DAS.NH.GOV

(Phone) 603-271-2201

(FAX) 603-271-2700

<http://das.nh.gov/purchasing>

DIVISION OF PROCUREMENT & SUPPORT SERVICES

BUREAU OF PURCHASE & PROPERTY

STATE HOUSE ANNEX – ROOM 102

25 CAPITOL ST

CONCORD NH 03301

# APPLICATION AND CERTIFICATE FOR PAYMENT

TO (OWNER):

PROJECT:

APPLICATION NO:

Distribution to:

OWNER

Period to:

ARCHITECT

CONTRACTOR

FROM:

VIA (ARCHITECT):

ARCHITECT'S

PROJECT NO:

CONTRACT DATE:

CONTRACT FOR:

Application is made for Payment, as shown below, in connection with the Contract. Continuation Sheet, AIA Document G703, is attached.

## CONTRACTOR'S APPLICATION FOR PAYMENT

CHANGE ORDER SUMMARY			ADDITIONS	DEDUCTIONS
Change Orders approved in previous months by Owner				
TOTAL			-	
Approved this Month				
Number	Date Approved			
TOTALS			-	-
Net change by Change Orders				\$0.00

- 1. ORIGINAL CONTRACT SUM .....
- 2. Net change by Change Orders .....
- 3. CONTRACT SUM TO DATE .....
- 4. TOTAL COMPLETED & STORED TO DATE .....
- 5. RETAINAGE:
  - a. 10% of Completed Work .....
  - b. 10% of Stored Material .....
  - Total Retainage .....
- 6. TOTAL EARNED LESS RETAINAGE .....
- 7. LESS PREVIOUS CERTIFICATES FOR PAYMENT ..
- 8. CURRENT PAYMENT DUE .....
- 9. BALANCE TO FINISH, PLUS RETAINAGE .....

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR:

By:

Date:

State of:

County of:

Subscribed and sworn to before me this \_\_\_\_ day of \_\_\_\_\_, 20\_\_

Notary Public:

My Commission expires:

AMOUNT CERTIFIED ..... \$ \_\_\_\_\_

(Attach explanation if amount certified differs from the amount applied for.)

ARCHITECT:

By:

Date:

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract

## ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising the above application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the contractor is entitled to payment of the AMOUNT CERTIFIED.

# CONTINUATION SHEET

AIA DOCUMENT G703

AIA Document G702, APPLICATION AND CERTIFICATE FOR PAYMENT, containing

APPLICATION NUMBER:

Contractor's signed Certification is attached.

APPLICATION DATE:

In tabulations below, amounts are stated to the nearest dollar.

PERIOD TO:

Use Column I on Contracts where variable retainage for line items may apply.

ARCHITECTS PROJECT NO:

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		F MATERIALS PRESENTLY STORED (NOT IN D OR E)	G		H BALANCE TO FINISH (C - G)	I RETAINAGE
			FROM PREVIOUS APPLICATION (D+E)	THIS PERIOD		TOTAL COMPLETED AND STORED TO DATE (D+E+F)	% (G÷C)		
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

# CONSTRUCTION SPECIFICATIONS

## TABLE OF CONTENTS

The standard specifications adapted to this project contain the following sections:

### SECTION

010000	General Requirements
015000	Temporary Utilities and Job Conditions
00618	Uniformed Officers and Flaggers
00619	Maintenance of Traffic
031500	Concrete Accessories
131100	Swimming Pools
321123	Aggregate Base Courses
321216	Asphalt Paving

## **SECTION 010000 - GENERAL REQUIREMENTS**

### **PART 1 GENERAL**

- 1.1 **RELATED DOCUMENTS:** The general provisions of the contract, including General and Supplementary Conditions, and all Division 1 sections of the specifications apply to the work specified in all sections of the Construction Specifications. The sketches and the specifications together comprise the construction documents. Any note in one shall apply to the other. The contractor shall report any discrepancies between the drawings and specifications to the Project Manager for resolution before proceeding with the work involved.
- 1.2 **SUMMARY OF THE WORK:** The intent of the contract is to provide the State with Asphalt Sidewalk Replacement and Sidewalk Repairs at Hampton Beach State Park, Hampton NH. The following work items give a general summary of the extent of the work but are not intended to be a complete itemization of the work.
- A. Contractor shall Provide a Traffic Control Plan (TCP) to be submitted for review and approval by the following; NHDOT District 6, Town of Hampton; Department of Public Works and Police Department, and to the DNCR Project Manager, for Approval at least 2 Weeks Prior to the start of the work.
  - B. Installation and management of Traffic Controls in accordance with the approved Traffic Control Plan. Provide Maintenance of Traffic for the duration of the work.
  - C. Provide Uniformed Police Officers and or Flaggers for the duration of the work, as identified in the TCP.
  - D. Remove sidewalk in areas as indicated on the plan.
  - E. Regrade base course to original elevations.
  - F. Pave new sidewalk with (2) courses of 2" inch asphalt per course.
- 1.3 **CONTRACTOR'S USE OF SITE AND PREMISES.**
- A. Limit use of site to allow:
    - 1. Inspection by representatives of the Department of Natural and Cultural Resources, Department of Transportation.
    - 2. Vehicle, pedestrian, bicycle, etc. traffic around the Work Zone.
  - B. The Project lies adjacent to an active recreational area, related businesses, and residential community. The Parking areas, shoulders, and Ocean Blvd. have been designated as the Contractor's Work Zone.
  - C. No More than 1 Parking Bays may be utilized as a work area for materials and or storage of equipment.
  - D. The Northbound and Southbound lanes of Ocean Blvd. must remain open and must not be obstructed.
  - E. The Contractor shall provide for the safe passage of all vehicles, bicycles, pedestrians, etc. around the Work Zone. A Traffic Control Plan (TCP) prepared by the Contractor shall be reviewed and approved by DNCR, NHDOT District 6, and the Town of Hampton Department of Public Works and Police Department. The Contractor shall fully institute all measures contained in the TCP prior to initiating any work. Any plan changes proposed by the Contractor shall be reviewed and approved by DNCR, NHDOT District 6, and the Town of Hampton DPW and Police Dept. prior to making those changes.

- 1.4 **PUBLIC ACCESS AND PROTECTION:** The grounds around the site will be open to the public and staff during the time the work is in progress. The contractor shall be responsible for roping off or barricading sufficient area around the work site to keep visitors and state personnel safe from construction hazards.
- 1.4 **COORDINATION WITH SEACOAST REGIONAL MANAGER:** The contractor shall coordinate in advance with the Seacoast Regional Manager Mrs. Meredith Collins (Tel. 603-573-6657) to arrange mutually acceptable times for closing off areas normally accessible to the staff and public, and to insure that suitable alternate access is made available.

**END OF SECTION 010000**

**SECTION 015000 - TEMPORARY UTILITIES & JOB CONDITIONS**

**PART 1 GENERAL**

- 1.1 **TEMPORARY FACILITIES AND SERVICES:** The Contractor shall be responsible for arranging and providing temporary facilities necessary to facilitate his work. The location of same shall be coordinated with and approved by the Project Manager and the Seacoast Regional Manager.

All such services and facilities shall comply with applicable Federal, State and Municipal regulations.

- 1.2 **FIRE PROTECTION:**

- A. The Contractor shall provide and maintain adequate fire protection in the form of fire extinguishers, or other effective means of extinguishing fire, ready for instant use, distributed around the project sites and in and about temporary inflammable structures during construction of work.
- B. Gasoline and other flammable liquids shall be stored in and dispensed from UL listed safety containers in conformance with National Board of Fire Underwriters' recommendations. Storage shall not be within any DRED owned buildings.
- C. Torch-cutting and welding operations performed by subcontractors shall have approval of the general contractor before such work is started, and a chemical extinguisher shall be available on location where such work is in progress.
- D. Do not light fires in or about premises.

- 1.3 **PROTECTION OF PROPERTY AND THE PUBLIC:** The Contractor shall construct all fences, barricades and protection facilities required for the protection of the public to the satisfaction of the Project Manager. Furnish and install all signs, lights, reflectors, and all such protection facilities as may be required by the Project Manager.

Keep all access roads and walks clear of debris, materials, and construction equipment. Repair streets, drives, curbs, sidewalks, fences, poles and the like where disturbed by construction to the satisfaction of the Project Manager.

- 1.4 **TEMPORARY STORAGE:** Delivery and storage locations shall be coordinated with and approved by the Project Manager.

The contractor shall provide at the site, where directed and maintain in good condition, suitable and substantial weather-tight storage as required for his materials that may be damaged by storage in the open.

- 1.5 **TEMPORARY FIELD OFFICE:** Not Applicable

- 1.6 **TOILETS:** Restroom facilities at Hampton Beach State Park will be made available for the contractors use during the operational season.

- 1.7 **CONTRACTORS AND SUBCONTRACTORS MEETINGS:** The Project Manager shall have the right to call together at reasonable times designated by him, representatives of the contractor and subcontractors who shall meet at the office of the contractor or at the job, to report as to the condition of the work under their charges, or on any other matters pertinent



to the conduct of the work.

Such representatives shall be empowered to make at these meetings, definite decisions binding upon their respective employers, regarding all matters pertaining to the work under this contract.

The Contractor shall furnish the Project Manager in writing, the names, addresses and telephone numbers of subcontractors' personnel to be contacted in the event of an out-of-hours emergency at the building site.

- 1.8 **MEASUREMENTS:** Before Submitting a bid, ordering any material, or doing any work, the Contractor shall verify all measurements and shall be responsible for the correctness of same. No extra charge or compensation will be allowed on account of difference between actual dimensions and the measurements indicated on the drawings; any difference which may be found shall be submitted to the Project manager in writing for consideration before proceeding with the work.

Responsibility for work fabricated accurately to field measurements to properly fit the new construction shall be solely that of the contractor, who shall pay all costs involved in correcting any misfitting work as fabricated.

- 1.9 **CUTTING AND PATCHING:** The Contractor shall do all cutting, fitting and patching of his work that may be required to make its several parts come together properly. Expense caused by defective or ill-timed work shall be borne by the contractor. Where field cutting is authorized or directed, provide adequate reinforcement of the weakened area in such form as is approved by the Project Manager.

- 1.10 **OCCUPATIONAL HEALTH AND SAFETY:** These contract documents, and the construction hereby contemplated shall be governed at all times by applicable provisions of all federal laws, including but not limited to the following:

- A. Williams-Steiger occupational Safety and Health Act of 1970, Public Law 91-596
- B. Part 1910 - Occupational Safety and Health Standards, Chapter XVII of Title 29, Code of Federal Regulations
- C. Part 1926 - Safety and Health Regulations for Construction , Chapter XIII of Title 29, Code of Federal Regulations

- 1.11 **PARKING:** Space will be allocated in the parking lots to accommodate a job trailer, vehicles, deliveries and limited storage. (additional storage areas may be made available through arrangements with the Seacoast Regional Manager on an as-needed basis).

- 1.12 **CLEANING:** As properties under the stewardship of the Division of Parks and Recreation, the grounds surrounding the project site will be open to the public and staff during all or part of the course of the work. Consequently, the sites must be kept clean, safe and presentable to the public. Construction debris shall be picked up at the end of each day's work and removed from the sites on at least a weekly basis. At the conclusion of the project, all barricades, equipment, and debris shall be promptly removed from the site.

**END OF SECTION 015000**

## **SECTION 00618 – UNIFORMED OFFICERS AND FLAGGERS**

### **DESCRIPTION**

- 1.1 This work shall consist of furnishing qualified uniformed officers, with or without vehicles, or flaggers as required to direct or control traffic through or around the work or as ordered.
- 1.1.1 The Contractor may perform flagging operations with his own forces or through approved Subcontractors. Flaggers shall be the primary means for providing dynamic temporary traffic control operations in work zones.
- 1.1.2 Uniformed officers shall have legal authority to enforce traffic laws on the roadways within the work zone. Uniformed officers may be utilized for their specific authority for operations beyond that of a flagger, such as assistance in speed control and traffic law enforcement, as necessary, and as approved by the Project Manager.

### **Equipment**

- 2.1 Vehicles for use with uniformed officers shall be official police vehicles with appropriate police markings and blue flashing lights that are visible from 360° around the vehicle and to oncoming traffic. Given the variability of markings and light arrangements of police vehicles, the final determination of acceptable police vehicles shall be made by the Contractor. Police vehicles with roof mounted lights are preferable when available. Police vehicles used at night shall have dimmable blue flashing lights appropriate for nighttime operations.
- 2.2 Traffic paddles and flagger equipment shall conform to those described in the MUTCD.
- 2.3 Two-way radios for uniformed officers and flaggers shall be dependable, providing clear communication at all times between radio operators.
- 2.4 For night operations, the use of lighting at flagger stations is required as stated in the MUTCD.

### **Construction Requirements**

- 3.1 **Uniformed Officers.** Uniformed officers furnished by the Contractor shall have had formal training in the *Safe and Effective Use of Law Enforcement in Work Zones* course or approved equivalent.
- 3.1.1 Effective April 1, 2013, all Uniformed Officers working on all NHDOT funded, including municipally managed, projects shall have successfully completed a NHDOT approved course on *The Safe and Effective Use of Law Enforcement Personnel in Work Zones*. This course shall be taken once every four years. Sources of NHDOT approved training can be found on the NHDOT website.
- 3.1.2 Upon request by the Project Manager, the officer shall provide verification of training within 48 hours.
- 3.1.3 Uniformed officers shall be attired with regulation duty uniforms, headgear, high-visibility apparel in accordance with the MUTCD, and shall wear an exposed badge.

- 3.2 Designated Flagger Trainers.** The Contractor or the Subcontractor(s) supplying flaggers shall have an employee(s) designated to train flag personnel. Designated trainers shall have taken a formal flagging course as described in 3.2.1 at least once every four years.
- 3.2.1** A flagging course taken by employees designated to train shall consist of a minimum of 3 hours of training providing the following general information:
- A. Federal requirements as specified in the MUTCD.
  - B. Need for consistent, current and understandable instruction from flaggers.
  - C. Understanding of the MUTCD Part VI requirements.
  - D. Awareness of types of motorists and vehicles (commuters, tourists, passenger, trucks, emergency, oversized, etc.).
  - E. Safety of the work crew, motorists and the flagger.
  - F. Qualities of a flagger.
  - G. Flagger attire.
  - H. Tools necessary to perform flagging operations and their correct use.
    - 1. Equipment which includes, but is not limited to, paddles, flags, flashlights for night, etc.
    - 2. Correct and appropriate hand signals.
  - I. Work station safety including, but is not limited to, placement of advance warning signs, flagger station location, and flagger position.
  - J. Additional requirements and differences of night flagging operations.
  - K. Coordination with other flaggers, work crew, uniformed officers, and traffic signals.
- 3.2.2** Designated trainers shall pass a written examination containing thirty or more questions reviewing the principles of flagging. A passing score shall be a minimum of 80 percent.
- 3.2.2.1** Upon successful completion of the flagging course and passing the written examination, the attendee shall receive a flagger handbook and a designated trainer completion certificate. The completion certificate shall contain the name of the successful attendee, the name of the course provider, and the date of the course.
- 3.3 Flaggers.** All flagging personnel shall be trained by a designated trainer at least once every four years. The course shall cover the topics outlined under 3.2.1. Each flagger shall receive from the designated trainer, a card or certificate that provides the date of training and the designated trainer's name. Upon request by the Project Manager, the Contractor and its Subcontractors shall provide verification of training within 48 hours. Any flagger who is trained by a designated trainer and changes employer, must be retrained by the new employer. Flaggers may elect to take a designated trainer course to meet the training requirements in this section, which would not expire with a change of employers.
- 3.3.1** Flaggers shall wear high visibility apparel in accordance with the MUTCD and their attire shall be distinctive from the other workers. Flaggers shall wear ANSI Performance Class 3 safety apparel when flagging during hours of darkness. While encouraged, the Class 3 requirement does not apply to pants.
- 3.4 Personnel Requirements and Authority.**

- 3.4.1 Uniformed officers and flaggers shall work well alone and as a member of a group, since traffic control operations are a team effort. Therefore, uniformed officers and flaggers shall also possess strong communication skills, as relaying traffic information to others (uniformed officers, flaggers, construction personnel, the public, etc.) is essential. The Contractor shall be responsible for providing specific instructions to uniformed officers and flaggers regarding their duties and responsibilities, both to the public and to their fellow workers on the job. They shall have authority to direct the movement of construction vehicles as well as vehicles of the traveling public, and shall do all that is reasonable to expedite that movement.
- 3.4.2 Uniformed officers shall have police powers granted by the authorities having legal jurisdiction in the work area.
- 3.4.3 The Contractor shall designate a person as the responsible party to coordinate the traffic control procedures. This person shall be responsible to collect and report the time of actual traffic control to the Project Manager.
- 3.5 When more than one Uniformed Officer or Flagger is required for traffic control, effective communication shall be maintained between stations. If effective communication cannot be maintained by voice or hand signals, two-way radios shall be used. Necessary safety precautions shall be taken when two-way radios are used in the vicinity of blasting operations.

**Method of Measurement**

- 4.1 Uniformed officers, uniformed officers with vehicles, and flaggers will be measured by the unit.
  - 4.1.1 The Contractor's schedule for utilizing uniformed officers, uniformed officers with vehicles, and flaggers shall be agreed upon cooperatively with the Project Manager. The Contractor may furnish additional traffic control personnel at his expense.

**Basis of Payment**

- 5.1 The hours authorized for uniformed officers or uniformed officers with vehicles will be paid for at the contractor's expense.
  - 5.1.1 (Not Applicable)
  - 5.1.2 (Not Applicable)
  - 5.1.3 Payment of the amount set in the proposal will be on a lump sum basis.
- 5.2 Flaggers will be paid for at the Contractor's expense.

**Pay items and units:**

618 Uniformed Officers & Flaggers Unit

**END OF SECTION 00618**

## **SECTION 00619 - MAINTENANCE OF TRAFFIC**

### ***Description***

### ***Materials***

### ***Construction Requirements***

3.1 Maintenance of Traffic.

3.2 Traffic Control Devices.

3.3 Pavement Marking.

### ***Method of Measurement***

### ***Basis of Payment***

### **Description**

- 1.1 This work shall consist of providing and maintaining safe and passable traffic accommodations for public travel; preventing dust nuisance; and furnishing, erecting and maintaining necessary traffic signs, barricades, lights, signals, delineators, concrete barriers, pavement markings, and other traffic control warning devices and shall include pilot car operations and other means of guidance of traffic through the work zone. The Contractor shall be responsible for this work and shall perform it in accordance with the current MUTCD, Work Zone Traffic Control Standard Plans, the approved Traffic Control Plan (TCP) and these specifications.
- 1.2 The Contractor shall determine the appropriate operational construction signs and warning devices based on the needs of the Contractors daily operation.

### **Materials**

- 2.1 Traffic control devices shall conform to the MUTCD and as specified herein. New devices covered by testing and evaluation criteria in the National Cooperative Highway Research Program (NCHRP) Report 350, titled "Recommended Procedures for the Safety Performance Evaluation of Highway Features," shall also conform to the criteria by the extended compliance dates implemented by the AASHTO-FHWA Agreement (350 Agreement) dated July 1, 1998. A summary of the work zone traffic control devices categories for new devices to conform with NCHRP Report 350 is provided in the Special Attention entitled "Roadside Safety Hardware Worthiness Compliance with NCHRP Report 350 and MASH".
  - 2.1.1 Base material for permanent construction signs shall be weather-proof, rigid substrate specifically manufactured for highway signing and meet the retroreflective sheeting application requirements of the sheeting manufacturer.
  - 2.1.2 Base material for operational construction signs shall conform to 2.1.1, except that flexible base material will be allowed.
  - 2.1.3 Retroreflective sheeting for traffic control devices, including permanent and operational construction signing, shall conform to AASHTO M 268 (ASTM D 4956), Type IV Retroreflecting Sheeting as a minimum or Type VI for flexible base material.
    - 2.1.3.1 Category I Traffic Control devices (plastic or rubber cones, tubular markers, flexible delineators, and plastic drums, etc.) shall have Type IV or higher sheeting.
    - 2.1.3.2 Orange signs mounted on fixed supports shall be a fluorescent orange color in accordance with [Section 718](#).

- 2.1.3.3** Sign text shall consist of the letters, digits and symbols either applied by stick-on or silkscreen, to conform with the dimensions and designs indicated in the Contract, NHDOT Construction Sign Standards, MUTCD or FHWA Standard Highway Signs. The materials and methods shall be in accordance with standard commercial processes.
- 2.1.3.4** Sign blanks shall be prepared in accordance with current practice as recommended by the sheeting manufacturer.
- 2.1.4** Supports and posts shall conform to the current AASHTO “ Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals”.
- 2.1.5** Portable changeable message sign (PCM) shall be capable of up to three lines of display with eight characters per line. Characters shall be a minimum of 18” high.
- 2.1.6** Trailer mounted speed limit signs shall be self-contained units, including sign assembly, flashing lights and power supply specifically constructed to operate as a trailer-mounted sign.

  - 2.1.6.1** Sign assembly shall be as shown in the NHDOT Construction Sign Standards.
  - 2.1.6.2** Each unit shall be equipped with two mono-directional flashing lights with amber lenses and reflectors which are visible through a range of 120 degrees when viewed facing the sign. The lights, LED, halogen or incandescent lamps, shall be visible for a minimum distance of one mile under daylight conditions and shall have a minimum flash rate of 40 flashes per minute. Bulb size shall be in accordance with the MUTCD. An “ ON” indicator light shall be mounted on the back of the signs which is visible for at least 500 ft. to provide confirmation that the flashing lights are operating.
  - 2.1.6.3** Power supply shall be either full battery power with solar panel charging (capable of maintaining a charged battery level) and 135 ampere, 12 volt deep cycle batteries, or diesel powered generator with a fuel capacity sufficient for 10 hours of continuous operation.
- 2.1.7** The Contractor shall provide a Certificate of Compliance stating that traffic control devices being provided meet the testing and evaluation criteria of NCHRP Report 350 as implemented by the 350 Agreement.
- 2.1.8** All category I, II, and III project work zone traffic control devices in use, except portable concrete barrier that transfers tension and moment from segment to segment, shall conform to the testing and evaluation criteria of NCHRP Report 350. Devices not conforming to the criteria shall be replaced with conforming devices at no expense to the Department.

## **Construction Requirements**

### **3.1 Maintenance of Traffic.**

- 3.1.1** Traffic control devices shall be properly placed and in operation before starting construction. When work of a progressive nature is involved, such as resurfacing, the

appropriate traffic control devices shall be periodically repositioned in the advance warning area.

**3.1.2** Whenever the highway is open to public traffic through any part of the project, the Contractor shall provide and maintain sufficient surface for at least one lane of traffic, and two lanes whenever possible. Control of one lane traffic will be required at all times.

**3.1.2.1** The Contractor shall notify the Project Manager and the DOT District 6 at least two weeks prior to beginning work that involves any major disruption of traffic.

**3.1.3** Traffic Control devices, either existing or supplied by the Department, shall be maintained at appropriate locations for the use of the traveling public during the construction period. Signs which are not applicable to construction conditions shall be covered completely with plywood, removed or relocated as necessary. Signs that are removed or relocated shall be retained and re-erected by the Contractor. The Contractor shall notify the Bureau of Traffic when any regulatory sign is removed or relocated.

**3.1.3.1** All existing speed limit signs which conflict with the construction zone trailer mounted speed limit signs shall be covered completely as specified in 3.1.3 during the operation of the flashing lights. These signs shall be immediately uncovered when the use of the flashing lights is discontinued.

**3.1.3.2** Devices damaged due to improper handling and storage shall be replaced with new devices.

**3.1.4** Dust control shall be performed in an approved manner, generally by the use of water, and shall be continued whenever necessary, even if all other work on the project is suspended.

**3.1.5** The Contractor may be required to delay or suspend work, as directed, that interferes with traffic during commuting hours, periods of inclement weather, or periods of high traffic volumes which result in excessive backup or create unsafe traffic operations.

**3.1.6** For the protection of traffic, equip all vehicles used on the project with amber flashing lights or rotating lights visible from 360 degrees around the vehicle. The flashing light system shall be in continuous operation while the vehicle is on any part of the traveled lanes, shoulders or ramps within the construction zone.

**3.1.7 Blank.**

**3.1.8** Before any suspension of the work, including end of workday, the Contractor shall make passable and shall open to traffic such portions of the project and temporary roadways or portions thereof as may be agreed upon between the Contractor and the Project Manager.

**3.1.8.1** Pavement authorized for removal for trenching purposes within the traveled way shall be replaced with temporary bituminous material (cold patch or reclaimed asphalt pavement) before the roadway is open to traffic and shall be replaced with applicable hot bituminous pavement conforming to Division 400 within 72 hours of completed backfill operations.

**3.1.9 (Not Applicable)**

**3.1.10** When work is resumed after any suspension, the Contractor shall replace or renew any work or materials lost or damaged because of such temporary use of the project.

**3.1.11** If the Project Manager determines that maintenance of traffic and provisions for safe traffic control are not being provided or maintained by the Contractor, the Department may assume this responsibility and deduct the cost from money due the Contractor.

**3.1.12** Any work performed by the Department, either when construction operations are taking place or during periods of suspension, will not invalidate the provisions of the Contract.

**3.2 Traffic Control Devices.**

**3.2.1** All traffic control devices supplied to the project shall be acceptable in accordance with the "Quality Standards for Work Zone Traffic Control Devices" as published by the American Traffic Safety Services Association (ATSSA) and the retroreflectivity shall be a minimum of 90 percent of new material.

**3.2.1.1** At any time during the life of the Contract, including any suspension, any traffic control device that is in an unacceptable condition as described in the "Quality Standards for Work Zone Traffic Control Devices" or has a retroreflectivity of less than 70 percent of new material shall be replaced.

**3.2.2** Construction signs shall be erected at the locations indicated on the plans or as approved. The posts shall be plumb. The signs shall be installed with the text horizontal.

**3.2.3** Traffic control devices shall be erected wherever necessary for the protection of public travel.

**3.2.3.1** Trailer mounted speed limit signs shall be used only during the Contractor's actual work hours, unless specifically authorized by the Project Manager. Prior to the initial use of the speed limit signs, the Contractor shall submit, for approval, his schedule for use including the time of proposed speed limit reductions. This schedule shall be submitted two weeks in advance of the proposed initial use to the NHDOT Bureau of Traffic, revise the proposed locations of the speed limit signs, if necessary, and authorize their use.

**3.2.3.1.1** The Contractor will record the actual time and location of the signs on a daily basis when the speed limit signs are in use.

**3.2.3.2** Trailer mounted speed limit signs shall be located, one on each shoulder, 2,000 feet in advance of the project limits for mainline traffic. A sign shall also be located on the right shoulder 1,500 feet beyond the end of ramp acceleration lanes within the project. Placement of additional "REMINDER" signs may be ordered by the Project Manager.



- 3.2.4 Operational signs and channelizing devices shall only be set up when weather conditions will allow adequate visibility.
- 3.2.5 Lighting devices shall be provided as required or ordered. The type and number of lighting devices shall conform to the plans and the MUTCD.
- 3.2.6 Keep all roadway areas that are open to traffic as clear as possible at all times. No materials or Contractor's plant and equipment shall be stored on any roadway areas or within the clear zone of the traveled way as specified in the TCP unless protected by portable barrier and specifically approved. Deliver materials to installation areas as needed to provide a continuous installation.
  - 3.2.6.1 Remove all equipment and construction vehicles from the traveled way and within the clear zone of the traveled way as specified in the TCP during non-work hours unless protected by portable barrier and specifically approved.
  - 3.2.6.2 Park workers' private vehicles close together in a group outside the clear zone of the traveled way as specified in the TCP unless protected by portable barrier and specifically approved.
  - 3.2.6.3 Traffic control devices, including arrow panels, portable changeable message signs and trailer mounted speed limit signs shall be removed outside the clear zone of the traveled way as specified in the Traffic Control Plan when not in use unless protected by portable barrier or equivalent and specifically approved.
  - 3.2.6.4 Trailer mounted traffic control devices, such as arrow panels, portable changeable message signs and trailer mounted speed limit signs shall be delineated with retroreflective temporary traffic control devices while in use. The trailers shall also be delineated by affixing a retroreflective material to them.
- 3.2.7 Do not conduct any operation (including loading and unloading vehicles) on or near the traveled way without first setting up the proper lane closure and traffic control devices.
- 3.2.8 All traffic control devices furnished by the Contractor shall remain the property of the Contractor unless otherwise specified and shall be removed at the completion of the project or when no longer required.

### **3.3 Pavement Marking.**

- 3.3.1 Pavement markings shall be used in combination with appropriate traffic control devices to clearly define the required vehicle paths in accordance with the MUTCD. The intended vehicle path shall be clearly defined by pavement markings or channelizing devices or both at the end of the work period.
  - 3.3.1.1 At the end of each day's paving operation on a traveled roadway, pavement markings for centerlines and lanelines shall be applied in accordance with the MUTCD and the Contract requirements. Temporary pavement markings may be used according to the NHDOT Work Zone Traffic Control Standard Plans and MUTCD, after which pavement markings that meet full MUTCD Standards shall be in place. All Temporary pavement markings shall remain in place while in service and if dislodged or rendered ineffective the temporary markings shall be replaced.

- 3.3.1.2 Temporary raised pavement markings may be used according to the MUTCD or as amended by the Work Zone Traffic Control Standard Plans, in the same color as specified for the markings and installed according to manufacturer recommendations. Temporary raised pavement markers shall not be used to supplement or substitute for edge lines. Temporary raised pavement markers shall be a product listed on the [Qualified Products List](#) under the 619 items.
- 3.3.1.3 Flexible raised pavement markers will not be permitted for use on Interstate or high speed, multi lane highways.
- 3.3.2 The application of pavement markings and/or removal of existing markings may not be required during daytime construction operations when traffic is controlled by flaggers or uniformed officers and channelizing devices are in place.
- 3.3.3 In the event that pavement markings are to be applied by the Department, the Contractor shall provide a clean surface and vehicle path free of obstructions.
- 3.3.4 Pavement markings that are no longer applicable shall be obliterated immediately preceding or following the change in lane usage. Such change in lane usage shall not be implemented until sufficient time, equipment, materials, and personnel are available to completely obliterate the markings.
- 3.3.5 Removable pavement marking tape shall be removed prior to placing subsequent pavement courses but not until immediately prior to beginning paving operations.

#### **Method of Measurement**

- 4.1 Maintenance of traffic will be measured as a unit.
- 4.2 Portable changeable message sign and trailer mounted speed limit sign will be measured as a unit. A unit shall consist of the sign as described, the trailer, fuel and all necessary moves as approved.
  - 4.2.1 Portable changeable message sign (unit/week) and trailer mounted speed sign will be measured as a unit week. A week shall consist of seven consecutive days beginning when the item is first used on the project. The number of units required each week will be specified in the Traffic Control Plan or as approved.
- 4.3 The temporary bituminous material required in 3.1.8.1 will not be measured for payment.

#### **Basis of Payment**

- 5.1 Maintenance of traffic will be paid for at the Contract lump sum price. Payment will be made periodically based on the anticipated construction period.
  - 5.1.1 When the project conditions warrant illumination and such work is not shown on the plans or in the Special Provisions, the cost of furnishing, installing, maintaining (including power) and dismantling the necessary lighting will be paid at the Contractor's expense.

- 5.1.2 Replacements of any traffic control device required by 3.1.3 or 3.2.1 will be at the Contractor's expense.
- 5.1.4 The material cost of permanent construction signs ordered but not included in the listing on the Contract plans will be paid for as provided in the allowances. The labor and equipment cost for installation will be paid for as provided in the allowances.
- 5.1.5 When no provision for Maintenance of Traffic is included in the Contract, this work will be subsidiary.
- 5.1.6 **(Not required Applicable)**
- 5.1.7 **(Not Applicable)**
- 5.1.8 **(Not Applicable)**
- 5.1.9 **(Not Applicable)**
- 5.2 Pavement markings, including temporary retroreflective paint pavement markings, will be paid for at the Contractor's expense.
- 5.2.1 Temporary raised pavement markings or temporary removable pavement marking tape required per 3.3.1.2, including maintenance, removal and disposal, will be subsidiary.
- 5.3 Obliteration of pavement markings will be paid for at the Contractor's expense.
- 5.4 **(Not Applicable)**
- 5.5 Unless an item is included in the Contract for relocation or removing signs, only the relocation of Type A signs will be paid for as provided in the allowances. All other signs covered, removed or relocated as provided in 3.1.3 will be subsidiary.
- 5.6 The accepted quantity of portable changeable message signs and trailer mounted speed limit signs will be paid for at the Contract unit price complete, for each unit used. Payment will be made periodically based on the anticipated need for each unit.
- 5.6.1 The accepted quantity of portable changeable message sign (unit\week) and trailer mounted speed sign will be paid for at the Contract unit price complete. Payment will be made based on the use for each unit, whether used once or multiple times during a week.

**Pay items and units:**

619.1 Maintenance of Traffic Unit

**END OF SECTION 00619**

## **SECTION 02760 – HOT – P O U R E D C R A C K S E A L A N T**

### **Description**

- 1.1 This work shall consist of filling the major cracks in the pavement with an approved sealant material. Fill all cracks in areas where specified on the plans, or as designated by the Project Manager.

### **Materials & Equipment**

- 2.1 Material shall be of the hot-poured type and be a product as included on the NHDOT Qualified Products List.

#### **HOT-POURED CRACK SEALANT**

- A. ITEM 413.1 - HOT Poured CRACK SEALANT (AASHTO M 324, Type II)

<b>Manufacturer:</b>	<b>Product:</b>
Crafco, Inc.	Flex a Fill 9005
Crafco, Inc.	Road Saver 201
FPT Infrastructure	Greyseal 6690
Maxwell Products, Inc.	Elastoflex 61
P&T Products, Inc.	Dura-Fill 3405

- 2.1.1 Material not covered by an asphalt pavement overlay shall meet the requirements of ASTM D6690 Type II.
- 2.2 Equipment shall meet the approval of the Project Manager and shall be maintained in good working condition at all times.
- A. Air compressors shall be portable and capable of furnishing not less than 100 ft<sup>3</sup> of air per minute at not less than 90 psi pressure at the nozzle. The compressor shall be equipped with traps that maintain the compressed air free from oil and water. Filters shall be inspected daily to ensure that they are still effective and not saturated with oil and moisture. Saturated and/or damaged filters shall be replaced.
- B. Melting kettles shall be of the double-boiler, indirect-fired, portable type. The kettle shall be mounted on rubber tires and shall be equipped with a metal shield beneath the firebox to protect the pavement. The space between the inner and outer shells shall be filled with a suitable heat transfer oil or substitute having a flash point of not less than 530°F. The kettle shall be equipped with a satisfactory means for agitating the joint sealer to maintain a uniform temperature. This may be accomplished by continuous stirring with mechanically operated paddles or by a continuous circulating gear pump attached to the heating unit, or by both paddles and a pump. Kettles equipped with rocking type agitation shall not be used. The kettle shall be equipped with a thermostatic control calibrated between 200° and 550°F.
- C. Routers for reshaping cracks shall be of the multi-blade rotary cutter head type.

- D. Hot-air lances for blowing clean and drying cracks shall be an approved propane gas burner and compressed air device that does not allow the flame to touch the pavement.
- E. The wand applicator shall be connected to the holding tank through an applicator hose that ensures the safety of the operator and allows the operator to control the flow of material. A device shall be mounted to bypass material into the holding tank if the applicator nozzle is shut off.

### **Construction Requirements**

- 3.1** All cracks greater than 1/8" up to 3/4" in width shall be shaped with a power router to a dimension of 3/4" +1/8" wide by 5/8" deep rectangular shape and treated unless otherwise directed. Cracks greater than 3/4" shall be treated but not routed. Router bits will be maintained to ensure that rectangular dimensions are achieved. A rounded shape will not be allowed.
- 3.2** All cracks ordered treated shall be hot-air lance cleaned of dirt, foreign material, and loose edges.
- 3.3** The material removed from the cracks shall be removed from the roadway surface prior to reopening the roadway to traffic.
- 3.4** The hot-poured sealant shall be maintained in the kettle and applied at the temperature range specified by the manufacturer. The Contractor shall furnish the Project Manager with copies of the manufacturer's literature indicating the application temperature range.
- 3.5** The hot-poured sealant shall be applied to the cracks using wand applicators within 2 minutes following hot-air lance cleaning. Only wand applicators shall be used for crack filling.
- 3.6** All cracks to be treated shall be filled to 1/16" to 1/8" below the pavement surface with hot-poured sealant with the sealant left slightly concave. Filling flush, overfilling, and overbanding of cracks will not be allowed. Sealant shall tightly bond to the pavement. The sealant bond to the pavement shall be checked after it has sufficiently cooled. If the sealant does not bond to the pavement, sealant shall be removed and crack sealing operations discontinued until debonding problem is corrected.
- 3.7** No hot-air lance cleaning or crack sealing shall be performed when the pavement and cracks are wet or the ambient temperature is below 50°F.
- 3.8** All work shall be performed in a neat manner. The sealant shall be allowed to cool sufficiently to prevent lifting, sticking, and tracking prior to returning the pavement segment to traffic.
- 3.9** The contents of the kettle shall be emptied at the end of each day and shall not be reused.

**Method of Measurement**

- 4.1 Hot-poured crack sealant will be measured by the pound of material incorporated in the work.

**Basis of Payment**

- 5.1 The accepted quantity of hot-poured crack sealant will be paid for at the contract unit price per pound, complete in place.
- 5.2 Cleaning and routing costs shall be included in the per pound price (subsidiary).

**Pay item and unit:**

413.1 Hot-Poured Crack Sealant	Per Pound
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**END OF SECTION 02760**

**SECTION 03 15 00 – CONCRETE ACCESSORIES**  
**EXPANSION/CONTRACTION JOINT FILLER**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Application of expansion/contraction joint filler.

**1.02 RELATED SECTIONS**

- A. Section 031500 Expansion/Contracting Control Joint

**1.03 REFERENCES**

- A. AASHTO M 153 - Standard Specification for Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction.
- B. ASTM D 545 – Standard Test Methods for Preformed Expansion Joint Fillers for Concrete Construction (Non-Extruding and Resilient Types).
- C. ASTM D 1752 - Standard Specification for Preformed Sponge Rubber Cork and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction.
- D. Corps of Engineers CRD-C 509 - Standard Specifications for Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction.
- E. FAA Specification Item P-610-2.7 - Structural Portland Cement Concrete.
- F. Federal Specification HH-F-341.

**1.04 SUBMITTALS**

- A. Submit manufacturer's product data and application instructions.

**1.05 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Store materials in a clean, dry area in accordance with manufacturer's instructions.
- C. Store cartons in a weatherproof location for periods not longer than six months.
- D. Protect materials during handling and application to prevent damage.

**PART 2 PRODUCTS**

**2.01 MANUFACTURER**

- A. W. R. MEADOWS, INC., PO Box 338, Hampshire, Illinois 60140-0338. (800) 342-5976. (847) 683-4500. Fax (847) 683-4544. Web Site [www.wrmeadows.com](http://www.wrmeadows.com).

**2.02 MATERIALS**

- A. Performance-Based Specification: Expansion joint filler composed of granulated cork particles, resin-bonded into board form, compressed and dehydrated under heat and pressure, that will expand up to 140% of the original thickness after installation due to the re- absorption of moisture. Joint filler shall conform to the following standards and have the following requirements:
  - 1. ASTM D 1752, Type III.
  - 2. AASHTO M 213, Type II.
  - 3. FAA Spec Item P-610-2.7.
  - 4. COE CRD-C-509, Type II.

5. Federal Specification HH-F-341 F, Type II, Class B.
  6. ASTM D 545
    - a. Density Minimum: 16.0 lb./ft.<sup>3</sup> (256 kg/m<sup>3</sup>)
    - b. Load to Compress to 50% original thickness: 50 – 1500 psi (0.34 – 10.33 MPa).
    - c. Recovery Minimum: 90%.
  7. Thickness: [1/2"]
- B. Proprietary-Based Specification: SELF-EXPANDING CORK EXPANSION JOINT Filler by W. R. MEADOWS.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Examine areas to receive expansion/contraction joint filler. Notify Project Manager if areas are not acceptable. Do not begin application until unacceptable conditions have been corrected.

### **3.02 APPLICATION**

- A. Install expansion-contraction joint filler in accordance with manufacturer's instructions.
- B. Position joint filler against walls, at interrupting objects or columns, and against abutting structures before concrete placement.
- C. Install joint filler 1/2" (6 mm) below concrete finish level.
- D. Seal with suitable joint sealant.

### **3.04 PROTECTION**

- A. Protect joint sealant from jobsite abuse prior to joint sealant application.

**END OF SECTION 03 15 00**



## **SECTION 13 11 00 JOINT SEALANTS**

### **PART 1 GENERAL**

#### **1.01 SECTION INCLUDES**

- A. Concrete joint preparation.
- B. Application of two-component, cold-applied, non-sag, joint sealant.

#### **1.02 RELATED SECTIONS**

- A. Section 03 15 00 – Concrete Accessories.

#### **1.03 REFERENCES**

- A. ASTM C920: Standard Specification for Elastomeric Joint Sealants.
- B. Federal Specification A-A-1556A: Sealing Compound (Elastomeric Joint Sealant).

#### **1.04 SUBMITTALS**

- A. Submit manufacturer's product data and application instructions.

#### **1.05 QUALITY ASSURANCE**

- A. Installer Qualifications: Use an installer and adequate number of skilled personnel who are thoroughly trained and experienced in joint sealing application techniques.
- B. Obtain joint sealant materials and accessories from a single manufacturer regularly engaged in manufacturing the product.
- C. Provide products which comply with all state and local regulations controlling use of volatile organic compounds (VOCs).

#### **1.06 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Store materials in a clean, cool, dry area in accordance with manufacturer's instructions.
- C. Do not open packaging until ready to use.
- D. Protect materials during handling and application to prevent damage or contamination.

#### **1.07 ENVIRONMENTAL REQUIREMENTS**

- A. Apply sealant at temperatures between 40o F and 122o F (4o C and 50o C).
- B. Do not apply sealant in joints containing free water.

### **PART 2 PRODUCTS**

#### **2.01 MANUFACTURER**

- A. W. R. MEADOWS®, INC., PO Box 338, Hampshire, Illinois 60140-0338. (800) 342-5976. (847) 683-4500. Fax (847) 683-4544. Web Site [www.wrmeadows.com](http://www.wrmeadows.com).

#### **2.02 MATERIALS**

- A. Joint Sealant: Pourable, two-component, cold-applied, non-sag, polysulfide based joint sealant.
  - 1. Performance Based Specification: Joint sealant shall have the following characteristics:

- a. Consistency: Thixotropic paste.
  - b. Application time (77° F - 50% RH): 1 hour.
  - c. Tack-Free Time: 4 hours.
  - d. Linear Shrinkage: Negligible.
  - e. Volume Shrinkage: Negligible.
  - f. Shore Hardness: Shore A 20 ± 5.
  - g. Tensile Strength: 125 - 250 psi. (862.5 to 1723 KPa)
  - h. Elongation: 400%.
  - i. Peel Adhesion (ASTM C794): 20 lb./in. min. (357 g/mm).
2. Proprietary Based Specification: DECK-O-SEAL GUN GRADE Two-Part, Elastomeric, Polysulfide Based Joint Sealant manufactured by W. R. MEADOWS.

### **2.03 ACCESSORIES**

- A. Joint Filler: CERAMAR® manufactured by W.R. MEADOWS.
- B. Primer System: P/G PRIMER manufactured by W.R. MEADOWS.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Examine areas to receive joint sealant. Notify consultant if surfaces are not acceptable. Do not begin joint preparation or sealant application until unacceptable conditions have been corrected.
- B. Ensure accessory materials are compatible with joint sealant and approved by membrane manufacturer.
- C. Ensure joint sealant is not in direct contact with asphaltic concrete pavements or asphaltic joint fillers.

### **3.02 JOINT PREPARATION**

- A. Ensure proper joint design practices are followed.
- B. Remove foreign substances, incompressibles, and free water from joint opening.
- C. Concrete joints must be clean and dry.
- D. Dust, dirt and laitance should be removed prior to application.
- E. Install backer rod or joint filler to control depth of joint sealant.
- F. Protect adjacent surfaces not designated to receive joint sealant.

### **3.03 PRIMING**

P/G PRIMER is recommended for optimum adhesion. P/G PRIMER is required for all joints subjected to hydrostatic pressure, submerged underwater, and/or joints over 1" in width.

- A. Mix all material in both containers.
- B. Pour part A into part B and mix thoroughly with a clean wooden or metal paddle for approximately 3 - 4 minutes.
- C. Scrape container sides and bottom for complete integration.
- D. Apply primer system to properly prepared joint surfaces by brush, depositing a light, continuous film.
- E. Apply an additional coat to very soft, porous surfaces.
- F. Allow primer to become tacky to the touch prior to application of the joint sealant.

### **3.04 APPLICATION**

- A. Mix the setting agent and base components separately using a wooden paddle or slow speed drill and flat blade paddle in accordance with manufacturer's instructions.
- B. Pour setting agent into base and mix slowly.
- C. Scrape material from sides and bottom until joint sealant is a uniform color.
- D. Continue mixing for a minimum of 10 minutes.
- E. Apply thoroughly blended material with a hand- or air-operated caulking gun, putty knife, or trowel.
- F. Tool sealant beads with tools wetted with clean water.
- G. Joint sealant will become tack free after approximately four hours and will fully cure after 24 hours at air and surface temperatures above 77o F (25o C).

### **3.05 CLEAN UP**

- A. Clean tools with xylene or toluene and remove masking tape before sealant cures.

**END OF SECTION 131100**

# **SECTION 310516 - AGGREGATES FOR EARTHWORK**

## **PART 1 GENERAL**

### **1.1 SUMMARY**

- A. Section Includes
  - 1. Coarse Aggregate Materials.
  - 2. Fine Aggregate Materials.
- B. Related Sections:
  - 1. Section 321123 – Aggregate Base Courses

### **1.2 REFERENCES**

- A. American Association of State Highway and Transportation Officials.
  - 1. AASHTO M147 – Standard Specifications for Materials for Aggregates and Soil-Aggregate Subbase, Base and Surface Courses.
  - 2. AASHTO T180 – Standard Specification for Moisture Density Relations of Soils Using a 4.54-Kg (10 -pound) Ramer and a 457-Millimeter (18-inch.) Drop.
- B. ASTM International:
  - 1. ASTM C136-Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
  - 2. ASTM D698-Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lb/ft<sup>3</sup> (600 kN-m/m<sup>3</sup>)).
  - 3. ASTM D1557-Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (56,000 ft-lb/ft<sup>3</sup> (2,700 kN-m/m<sup>3</sup>)).
  - 4. ASTM D2487-Standard Classification of Soils for Engineering Purposes (Unified Soil Classification System).
  - 5. ASTM D4318-Standard Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
- C. NHDOT Standard Specification for Road and Bridge Construction (SSRBC), latest edition.

### **1.3 SUBMITTALS**

- A. Materials Source: Submit name of imported materials suppliers.
- B. Manufacturer's Certificate: Certify products meet or exceed specified requirements.

### **1.4 QUALITY ASSURANCE**

## **PART 2 PRODUCTS**

### **2.1 SUBSTITUTIONS**

- A. Substitutions shall be as specified herein, except, consideration shall be given to other products that meet or exceed those specified if requested five (5) business days prior to the date of the bid opening.

### **2.2 COARSE AGGREGATE MATERIALS**

- A. Coarse Aggregate Type A1 Gravel: SSRBC, Section 304 Item 304.2
- B. Coarse Aggregate Type A2 Crushed Gravel: SSRBC, Section 304, item 304.3
- C. Coarse Aggregate Type A3 Structural Fill: SSRBC, Section 508, Item 508.
- D. Coarse Aggregate Type A4 Crushed Stone: crushed stone ; free of shale, clay, friable material, and debris; graded in accordance with ASTM C-33 Standard Stone #67; within the following limits:

Sieve Size	Percent Passing
2 Inches	100
1 Inch	100
¾ inch	90 to 100
5/8 inches	-
3/8 inches	20 to 55
No. 4	0 to 10
No. 8	0 to 5
No. 40	-
No. 200	-

### PART 3 EXECUTION

#### 3.1 STOCKPILING

- A. Stockpile materials on site at locations designated by Owner/Project Manager.
- B. Stockpile in sufficient quantities to meet Project schedule and requirements.
- C. Separate different aggregate materials with dividers or stockpile individually to prevent mixing.
- D. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.

#### 3.2 STOCK PILE CLEANUP

- A. Remove stockpile, leave area in clean and neat condition.

END OF SECTION 310516

## **SECTION 311000 SITE CLEARING**

### **PART 1 GENERAL**

#### **1.1 SUMMARY**

- A. Section Includes
  - 1. Removing designated paving, and associated features.

#### **1.2 QUALITY ASSURANCE**

- A. Conform to applicable code for disposal of debris.

### **PART 2 PRODUCTS**

- A. **Not Used**

### **PART 3 EXECUTION**

#### **3.1 EXAMINATION**

- A. Verification of existing conditions before beginning work.
- B. Identify salvage area for placing removed materials.

#### **3.2 PREPERATION**

- A. Call DIG-SAFE (1-888-DIG-SAFE), (1-800-344-7233), ([digsafe.com](http://digsafe.com)) and the local utility line information service at not less than three working days before performing work.
- B. Locate all existing underground utilities in areas of work, if utilities are to remain in place, provide adequate means of support and protection during earthwork operations.
- C. Should uncharted or incorrectly charted piping or other utilities be encountered during excavation, inform the Project Manager and consult with the utility owner and the Project Manager immediately for directions on how to proceed.
- D. Barricade and post open excavations occurring as part of this work.
- E. Protect structures, utilities, roads, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.

- 3.3 **EXCAVATIONS:** Slope sides of excavations to comply with local codes and ordinances. Shore and brace where sloping is not possible. Maintain sides and slopes of excavations in safe condition until completion of backfilling.

- 3.4 Prevent surface water and subsurface or ground water from flowing into excavations and from flooding project site and surrounding area. Do not allow water to accumulate in excavations. Remove water to prevent softening of foundation bottoms, undercutting footings, and soil changes detrimental to stability of subgrades and foundations.

- 3.5 Stockpile excavated materials acceptable for backfill or fill where directed by the Project Manager. Place, grade, and shape stockpiles for proper drainage. Locate and retain soil materials away from edge of excavations. Dispose of excess excavated soil materials and materials not acceptable for use as fill or backfill.

- 3.6 **BACKFILL AND FILL:** Place soil material in layers to required subgrade elevations, for each area classification listed below, using materials specified in PART 2 of this section:
- A. Under walks and pavements: Use subbase material, or satisfactory excavated or borrow materials, or a combination of both.
- 3.8 Backfill excavations as promptly as work permits but not until completion of the following:
- A. Acceptance of construction below finish grade.
  - B. Inspection, testing, approval, and recording locations of underground utilities.
  - C. Removal of trash and debris.
- 3.9 **PLACEMENT AND COMPACTION**
- A. Place backfill and fill material in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches loose depth for compaction by hand-operated tampers.
  - B. Before compaction, moisten or aerate each layer as necessary to provide optimum moisture content. Compact each layer to required percentage of maximum dry density or related dry density for each area classification. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.
  - C. Percentage of Maximum Density Requirements: Compact soil to not less than the following percentages of maximum density in accordance with ASTM D1557:
    - 1) Under pavements: Compact 12" of subgrade and each layer of backfill or fill material to 95% max density.
- 3.10 **GRADING:** Uniformly grade areas within limits of grading including adjacent transition areas. Grade areas adjacent to building lines to drain away from structures and to prevent ponding. Finish surfaces free from irregular surface changes.
- 3.11 **EROSION CONTROL:** Provide erosion control methods in accordance with Department of Environmental Services' requirements. Take all measures required to prevent silt from draining into adjacent properties.
- 3.12 Repair and re-establish grades in settled, eroded, and rutted areas before substantial completion of project.
- 3.13 **DISPOSAL OF EXCESS AND WASTE MATERIALS:** Remove waste material including unacceptable excavated material, trash, and debris, and dispose of it off State property.

**END OF SECTION 311000**

## **SECTION 321123 - AGGREGATE BASE COURSES**

### **PART 1 GENERAL**

#### 1.1 SUMMARY

##### A. SECTION INCLUDES

1. Aggregate subbase
2. Aggregate base course

##### B. Related Sections

1. Section 321216 Asphalt Paving.

#### 1.2 REFERENCES

- A. American Association of State Highway and Transportation Officials:
- B. NHDOT Standard Specification for Road and Bridge Construction (SSRBC), latest edition.

#### 1.3 SUBMITTALS

- A. Materials Source: Submit Name of Aggregate Materials Suppliers.

#### 1.4 QUALITY ASSURANCE

- A. Furnish each aggregate material from single source throughout the work.
- B. Perform Work in accordance with NHDOT Standards.

### **PART 2 PRODUCTS**

#### 2.1 AGGREGATE MATERIALS

- A. Subbase Aggregate: Fill Type A1 as specified in Section 310516
- B. Base Aggregate: Fil Type 2 as specified in Section 310516

### **PART 3 EXECUTION**

#### 3.1 EXAMINATION

- A. Verify compacted substrate is dry and ready to support paving and imposed loads.
  1. Proof roll substrate with minimum two perpendicular passes to identify soft spots.
  2. Remove soft substrate and replace with compacted fill as specified in Section 312323.
- B. Verify Substrate has been inspected, gradients and elevations are correct.

#### 3.2 PREPERATION

- A. Correct irregularities in substrate gradient and elevation by scarifying, reshaping, and re-compacting.
- B. Do not place fill on soft, muddy or frozen surfaces.



### 3.3 AGGREGATE PLACEMENT

- A. Spread aggregate over prepared substrate to total compacted thickness as indicated on the drawings.
- B. Roller compact aggregate to 95 percent maximum density.
- C. Level and contour surfaces to elevations, profiles and gradients as required.
- D. Maintain optimum moisture content of fill materials to attain specified compaction density.
- E. Use mechanical tamping equipment in areas inaccessible to compaction equipment.

### 3.4 TOLERANCES

- A. Maximum Variation From Flat Surface:  $\frac{1}{4}$  inch measured with 10 foot straight edge.
- B. Maximum Variation From Thickness:  $\frac{1}{4}$  inch.
- C. Maximum Variation From Elevation  $\frac{1}{2}$  inch.

END OF SECTION 311123

## **SECTION 321216 - ASPHALT PAVING**

### **PART 1 GENERAL**

#### **1.1 SECTION INCLUDES**

- A. Paving, hand method and machine method
- B. Pavement patching.
- C. Sawed Pavement

#### **1.2 REFERENCES:** All work performed under these Specifications shall be subject to the following references:

- A. State of New Hampshire Department of Transportation, "Standard Specifications for Road and Bridge Construction" approved and adopted 2016, together with all revisions, addenda, special provisions and supplements issued thereto, except as noted below.
  - 1. All portions of the SSRBC relating to "Basis of Payment" and Method of Measurement shall not apply to this project.
  - 2. Division 100, General Provisions of the SSRBC shall not apply to this project except for provisions of Division 100 referenced in Division 200 through 700, to the extent that those provisions do not conflict with the "General Conditions for public Works Projects," Paragraph 1 above, and other express provisions of this contract.
  - 3. Various technical provisions of some sections of the SSRBC are modified by other Division 2 and 3 Sections of these Specifications, and such modifications shall take precedence over the SSRBC provisions.
  - 4. All applicable technical provisions of the SSRBC shall be considered effective for work under this Division unless expressly noted otherwise in the Contract Documents.
  - 5. Copies of the SSRBC may be obtained from the New Hampshire Department of Transportation, John O. Morton Building, Hazen Drive, Concord, New Hampshire or online at: <https://www.dot.nh.gov/about-nh-dot/divisions-bureaus-districts/highway-design/highway-standard-specifications/2016>
- B. If there are any conflicts between references the most stringent reference, as determined by the Project Manager , shall apply.

#### **1.3 QUALITY CONTROL, TESTING, AND REPORTING**

- A. Material Certificates: The Contractor shall submit to the Project Manager sworn material certificates from the suppliers of bituminous concrete. The certificates shall indicate that the materials provided are in every way in conformance with the requirements of these Specifications.
- B. All pavement shall be graded so that no water puddles. Any pavement that does not drain shall be removed, re-graded, and re-paved to correct any drainage problems.
- C. Equipment shall be in good operating condition. There shall be sufficient equipment on site to provide continuous operation. If there is insufficient equipment or the equipment is not functioning properly the contractor will not be allowed to begin paving until the deficiency is corrected.

## 1.4 REGULATORY REQUIREMENTS

- A. The contractor shall comply with all State and Federal environmental regulations regarding the making and placement of pavement.

## **PART 2 PRODUCTS**

### 2.1 BITUMINOUS CONCRETE PAVEMENT

- A. Asphalt Materials:
  - 1. Asphalt Binder: In accordance with SSRBC, Section 401
  - 2. Asphalt Cement: In accordance with SSRBC, Section 401
  - 3. Primer: in accordance with SSRBC, Section 401
- B. Aggregate Materials:
  - 1. Coarse Aggregate: In accordance with SSRBC, Section 401
  - 2. Fine Aggregate: In accordance with SSRBC, Section 401
  - 3. Mineral Filler: In accordance with SSRBC, Section 401
- C. Aggregate Subbase: Specified in section

### 2.2 MIXES

- A. Use dry material to avoid foaming. Mix uniformly.
- B. Asphalt Paving Mixture designed in accordance with SSRBC section 401.

## **PART 3 EXECUTION**

### 3.1 EXAMINATION

- A. Verify compacted subbase is dry and ready support paving and imposed loads.
  - 1. Proof roll subbase with minimum two perpendicular passes to identify soft spots.
- B. Verify gradients and elevations of base are correct.
- C. Verify all project items within limits of pavement are installed in correct position and elevation.

### 3.2 WEIGHING AND HAULING OF BITUMINOUS PAVEMENT

- A. Weighing and hauling shall be in compliance with section 400 – Pavements, of the SSRBC

### 3.3 PLACING OF BITUMINOUS PAVEMENT

- A. Description of Work: The surface pavement shall be tack coated and repaved in the following areas and depths:
  - 1. Walkways. The walkways area pavement shall be new pavement, matching the existing in type and grade. The new pavement shall be keyed into the existing pavement. The Contractor shall confirm all dimensions in the field to his satisfaction.
- B. Pre-paving Conference: Prior to placing any mix, a prepaving conference shall be held to discuss and approve the paving schedule, source of mix, type and amount of

equipment to be used, sequence of paving pattern, rate of mix supply, traffic control and general continuity of the operation. Special attention shall be made to the paving pattern sequence to minimize cold joints. The field supervisors of the above-mentioned operations shall attend this meeting. All equipment used shall be approved and on the project site prior to starting up each day.

- C. Weather Limitations: Mixtures shall be placed only when the underlying surface is dry, frost free and the surface temperature is above 50 degrees Fahrenheit for courses less than 1-1/2" thick in compacted depth. The Project Manager may permit, in case of sudden rain, the placing of mixture then in transit from the plant, if laid on a base free from pools of water provided all other specifications are met. No load shall be sent out so late in the day that spreading and compaction can not be completed during the daylight. If rapid surface cooling of the laid down mix is occurring due to wind, the Project Manager may suspend operations for the day.
- D. Matching Pavement: Where new pavement meets existing pavement, the existing pavement shall be saw cut to provide a neat clean joint. Apply bituminous tack coat to joint.
- E. New Paving to match existing pavement in type and grade.
- F. Sweeping: Existing pavement previously laid courses shall be thoroughly dry and free from all dust, dirt and loose material. Sweeping with a power broom, supplemented by hand-brooming, may be necessary.
- G. Tack Coat: Surfaces of any pavement course that have been exposed for a considerable length of time shall be covered by a tack coat of emulsified asphalt. Rate of application shall be between 0.1-0.3 galls/square yard as determined by the Project Manager in the field.
- H. Paving small Areas by Hand: Relatively small areas not accessible to the paver may be spread by hand, but extreme care shall be taken to create a surface texture similar to the machine work. Surface material shall be spread by lutes and not by rakes.

### 3.4 **COMPACTION OF PAVEMENT**

- A. Finish Compaction Requirements: Base Courses shall be rolled until all roller marks are eliminated. The wearing course shall be rolled until all roller marks are eliminated, and a minimum density of 95 percent laboratory specimens, made by the AASHTO T 245, method in the proportions of the job mix formula has been obtained.
- B. Displacement: Any displacement occurring as a result of reversing the direction of a roller, or from other causes, shall be corrected at once by the use of lutes and addition of free mixture when required by the Project Manager. Care shall be exercised in rolling not to displace the line and grade of the edges of the bituminous mixture.
- C. Contractor shall use a mechanical roller to properly compact pavement.

### 3.5 **PROTECTING PAVEMENT**

- A. Protect all pavement from traffic during all operations, and until it is thoroughly set and cured and is not damaged by normal foot or wheeled traffic.

### 3.6 **REPLACING OF UNSATISFACTORY PAVEMENT**

- A. Unsatisfactory Pavement: If unsatisfactory areas are found in any pavement course, the Contractor shall remove the unsatisfactory material and replace it with satisfactory material after coating the exposed edges with suitable bituminous material.

- B. Settlement: Should any pavement settle within one year from the date of acceptance of the Work, the Contractor shall repair such pavement at his own expense. If the contractor fails to make such repairs promptly upon receipt of notice to do so from the Project Manager, then the Project Manager may make such repairs as necessary and the Contractor shall be responsible for all costs incurred in making such repairs.

### 3.7 PAVEMENT PATCHING

- A. General: The Contractor shall patch all pavement shown on the plans, described in the Specifications, new pavement that is unsatisfactory and all pavement damaged during construction.
- B. Description: Pavement patching shall consist of neatly saw cutting around pavement to be removed, removing of unsatisfactory or damaged pavement, leveling and compacting subgrade material, coating joints with an approved bituminous tack coat material, placing and compacting one or two courses of pavement to match surrounding pavement. When patching pavement, the material shall be placed on the prepared clean underlying surface at the locations designated and spread to product a smooth uniform patch. The patch material shall be thoroughly compacted and shall match the line and grade of the adjacent pavement.

### 3.8 SAWED PAVEMENT

- A. Description: This work shall consist of sawing concrete pavement, bituminous pavement, or both, as shown on the plans or as instructed by the Project Manager. Where new pavement meets old pavement the old pavement shall be saw cut to provide a clean straight surface for the new pavement to match in.
- B. Marking Pavement: Concrete pavement of bituminous pavement to be sawed shall be accurately marked before sawing.
- C. Equipment: The equipment used to saw concrete or bituminous pavement shall be capable of sawing the pavement as shown on the plans or as directed by the Project Manager and shall produce a substantially vertical and sound face without deformation of the adjacent pavement. The use of cutting wheels, pavement breakers, etc., which deform the pavement or leave an unsound face, will not be permitted.
- D. Pavement over Concrete: Where the pavement is found to consist of an overlay of bituminous pavement above a concrete slab, the cut shall be increased enough to score the underlying concrete so that the concrete may be broken in a reasonably uniform manner.

END OF SECTION 321216