COMMUNITY COLLEGE
system of New Hampshire

REQUEST

FOR

BIDS

RVCC PARKING LOT RE-PAVING

at

RIVER VALLEY COMMUNITY COLLEGE

A COMPONENT OF THE

Community College System of New Hampshire

26 College Drive, Concord, NH

Project# RVC 19-02

March 27, 2019

DOCUMENT 00015

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END OF SECTION

SECTION 00010 - INVITATION TO BID – CCSNH

Electronic Bids per the Project Manual Technical Specifications will be accepted by email to Matthew Moore, Director of Capital Planning and Development at memoore@ccsnh.edu until **Tuesday April 16th, 2019 at 3:00pm** for the following project:

RVC 19-02 Parking Lot Re-Paving

at River Valley Community College, 1 College Drive, Claremont, NH
a Component of the Community College System of New Hampshire
26 College Drive, Concord, NH

Project # RVC 19-02

Description: This project consists of a one-inch pavement overlay and parking lot striping of an existing parking lot that is approximately 85,000 Square Feet.

The Project will include but not be limited to the Disciplines of: Asphalt pavement, and paint striping.

Plans and specifications will be available from the Community College System of New Hampshire, **March 27, 2019 on the CCSNH website** www.ccsnh.edu/open-bids

Plans and specifications will also be available at the following printers:

- Signature Press and Blueprinting, Inc., 45 Londonderry Turnpike, Rte. 28 Bypass, Hooksett, NH 03106;
- Construction Summary of NH: Inc., 734 Chestnut Street, Manchester, NH 03104;
- Infinite Imaging: 933 Islington Street, Portsmouth, NH 03801
- Minuteman Press: 109 Gosling Road, Newington, NH 03801;
- Works in Progress, 20 Farrell Street, Suite 103, South Burlington, VT 05403
- The Blue Book, http://www.thebluebook.com/
- Community College System of New Hampshire website www.ccsnh.edu/open-bids

BIDDERS SHOULD ACT PROMPTLY AND SUBMIT ALL QUESTIONS IN WRITING TO: MATTHEW MOORE, DIRECTOR OF CAPITAL PLANNING AND DEVELOPMENT, E-MAIL memoore@ccsnh.edu .

A MANDITORY SITE VISIT WILL NOT BE HELD.

Project substantial completion date is **August 23, 2019.**

Proposals must be completed in both words and figures on forms furnished by the College, or on previously-approved, substantially-identical forms generated by computer software, which shall be submitted electronically in an e-mail titled: **"Bid for: RVC 19-02 Parking Lot Re-Paving"** received by MATTHEW MOORE at **memoore@ccsnh.edu** as specified no later than **3:00 PM**, **Tuesday, April 16th, 2019.**

Companies, corporations or trade names, except sole proprietorships must be registered with the Secretary of State (Corporate Division, Telephone No. 603/271-3244) in order to do business with the State of New

Hampshire.

Bidders must show three recent years' experience with installations of a similar complexity and cost and prior experience with installations of the materials within 50 miles of the project site.

The successful bidder will be required to comply with State of New Hampshire RSA#21-1:81-a. The successful bidder will be required to furnish a 100% payment and 100% performance bond prior to execution of contract.

The award will be based on the proposal that best meets the needs of the college. Factors included will be the cost, completeness of the proposal, quality of the technology provided, and experience of the contractor and installation team. The college reserves the right to waive any informality in or to reject any or all proposals.

Category	Possible Points*
1. Cost of Base Proposal	70
2. Quality of the related projects/areas of expertise/experience	30
Grand Total	**100***

***Maximum points for the best and so forth. Difference between scores is based on how close they are to one another.**
The College reserves the right to waive any and all informalities in its best interest.

All contract documents can be found on the CCSNH website at www.ccsnh.edu/open-bids
Before your submission, always check for any addenda or other materials that may have been issued which would affect the invitation to bid by checking the CCSNH website at www.ccsnh.edu/open-bids

The right is reserved to waive any informalities in or to reject any or all proposals.

Matthew Moore, PE,
Director of Capital Planning & Development
Community College System of New Hampshire

END OF DOCUMENT

DOCUMENT 001153 - REQUEST FOR QUALIFICATIONS

1.1 PURPOSE, LAWS, AND REGULATIONS

A. The purpose of the Prequalification Procedure described in this Document is to provide Owner with a mechanism to evaluate and determine whether Prospective Bidders are qualified to participate in the construction of Project. Evaluation will be limited to that office of the Prospective Bidder that is proposed to perform the Work.

1.2 DEFINITIONS

A. Prospective Bidder: A Prospective Bidder is a person or entity who submits a Submittal of Qualifications to Owner.

1.3 QUALIFICATION PROCEDURES

A. Prospective Bidders shall complete all required forms and attachments described in the Prequalification Documents, entering "Not Applicable" where information does not apply. Absence of any of the forms included in the Prequalification Documents will be reason for possible disqualification.

B. Status of Prospective Bidders:

1. Proprietors submitting bids shall indicate their status as proprietors.
2. Prospective Bidders submitting qualifications for partnerships shall indicate their status as partners and shall submit a certified copy of the power of attorney authorizing the executor of the submittal to bind the partnership.
3. Prospective Bidders submitting qualifications for corporations shall indicate their status as corporations and shall submit a certified copy of the board of directors' authorization for the Prospective Bidder to bind the corporation and shall affix the corporate seal on the submittal.
4. Prospective Bidders shall provide the following:

    a. Names and addresses of proprietors, of all members of a partnership, or of the corporation's officers.
    b. Name of jurisdiction where the partnership is registered or where the corporation is incorporated. Corporations must be licensed to do business in Project state at the time of executing the Contract.

1.4 WITHDRAWAL

A. A Qualification Statement may be withdrawn on personal request received from the Prospective Bidder.

1.5 QUALIFICATION STATEMENT

A. The undersigned submits answers to the following questions to enable the Community College System of New Hampshire to judge experience and ability in the work proposed to be done.

1. The work, if awarded to you, will have the resident personal supervision of whom? State his/her name, title, and their special qualifications.

_____
_____
_____
_____

2. (a) Provide a brief history of your firm. (b) Demonstrate that your firm has provided satisfactory work on similar projects.

a)_____
_____
_____
_____

b)_____
_____
_____
_____

3. How many years has your organization been in business as a contractor under the name in which you propose to execute this contract?

_____

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

_____

5. Provide three (3) Examples of Experience with full responsibility for work of a similar size to this project and within 50 miles of the project site.

Qualifications to perform the work: List Three
Experience with full responsibility for work of a similar size and within 50 miles of the project site.
Bidders are to provide evidence of qualifications with the bid.

NAME OF REFERENCE PROJECT _____ _____

Location of Project _____ _____

Date work performed _____ _____

Name of Owner
Contact Name & Phone Number _____ _____

Description of Project _____ _____

Approx. Contract value _____ _____

NAME OF REFERENCE PROJECT _____ _____

Location of Project _____ _____

Date work performed _____ _____

Name of Owner
Contact Name & Phone Number _____ _____

Description of Project _____ _____

Approx. Contract value _____ _____

NAME OF REFERENCE PROJECT _____

Location of Project _____ _____

Date work performed _____ _____

Name of Owner
Contact Name & Phone Number _____ _____

Description of Project _____ _____

Approx. Contract value _____ _____

DOCUMENT 00204

INSTRUCTIONS TO BIDDERS – Community College System of New Hampshire (CCSNH)
Issued 2-05-2004; Revised as noted

Revised 4/17/18

PART	ITEM
1	DEFINITIONS
2	PREPARATION AND SUBMISSION OF BIDS
3	RECEIPT AND OPENING OF BIDS
4	WITHDRAWAL OF BIDS
5	PROPOSAL GUARANTY (intentionally omitted)
6	CONDITIONS AT SITE OR BUILDING
7	EXPLANATION TO BIDDERS
8	REJECTION OF BIDS
9	CONTRACT BOND
10	CONTRACTOR'S AND SUBCONTRACTOR'S INSURANCE
11	BIDDING DOCUMENTS
12	SUBSTITUTIONS
13	AWARD OF CONTRACT
14	PERMITS AND FEES

PART 1 DEFINITIONS

1.1 Refer to Document 00708: General Conditions – CCSNH:

PART 2 PREPARATION AND SUBMISSION OF BIDS

2.1 The Bidder is required to bid on all items called for in the Proposal. If Alternates are included, the Bidder shall set forth in the space provided the amount to be added to or deducted from the Lump Sum Base Bid or the Lump Sum Grand Total. If an Alternate called for does not involve a change in price, the Bidder shall so indicate in the space provided.

2.2 Bids shall be submitted upon the Proposal Form furnished and shall be signed in ink. The Bidder shall specify a unit price, both in words and figures, for each item called for in the Lump Sum Grand Total Proposal. All of the words and figures shall be in ink or typed. If a unit price or a Lump Sum Grand Total already entered by the Bidder on the Proposal Form is to be altered, it should be crossed out with ink, the new unit price and the Lump Sum Grand Total bid entered above or below it and initialed by the Bidder; also in ink. In case of discrepancy between the prices written in words and those written in figures, the prices written in words shall govern. Bids containing any conditions, omissions, unexplained erasures or alterations, or items not called for in the Proposal or irregularities of any kind may be rejected by the Chancellor as being incomplete non-conforming, or non-responsive.

2.3 Each bid must contain the full business address of the Bidder and be signed by him/her with his/her usual signature.

A. Bids by a partnership of any form must furnish the full names of all partners, and must be signed in the partnership name by one of the members of the partnership or by an authorized representative, followed by the designation of the person signing. All Contracts with partnerships must include a certificate of authorization demonstrating that the partner(s) or authorized individuals have been authorized by the partnership to enter into the Contract on behalf of the partnership.

B. Bids by a corporation of any form must be signed with the legal name of the corporation, followed by the name of the State of incorporation and by the signature and designation of the president, secretary or other person authorized to bind it in the matter. The name of each person signing shall also be typed or printed below the signature. [*A bid by a person who affixes to his/her signature, the word "President," "Secretary," "Agent" or other designation, without disclosing whom he/she is representing if other than the contracting entity noted above, may be held to the bid of the individual signing.*]

C. Bids by proprietorships (individuals), or by individuals with a registered trade name, or doing business under an assumed name (aka d/b/a), shall be executed by the individual in their name, with reference to the trade name or assumed name.

2.4 Bids to be scanned and transmitted by electronic mail to memoore@ccsnh.edu no later than the bid deadline.

PART 3 RECEIPT AND OPENING OF BIDS

3.1 The bid opening officer will decide when the specified time has arrived, and no bid received or presented thereafter will be considered. No responsibility or liability will be attached to any officer for the premature opening of a bid not properly addressed and identified.

PART 4 WITHDRAWAL OF BIDS

4.1 A bid may be withdrawn upon written request received from the bidder at the Director of Capital Planning and Development office at 26 College Drive, Concord, NH 03301-7407, with reasonable time prior to the time fixed for opening. Negligence on the part of the bidder in preparing the bid confers no right for the withdrawal of the bid after it has been opened.

PART 5 PROPOSAL GUARANTY (intentionally omitted)

PART 6 CONDITIONS AT SITE OR BUILDING

6.1 Bidders shall visit the site and be responsible for having ascertained pertinent local conditions; such as location, accessibility and 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 submitting the bid.

PART 7 EXPLANATION TO BIDDERS

7.1 No oral explanation in regard to the meaning of the Bidding Documents will be made and no oral instructions will be given before the award of the Contract. Discrepancies, omissions or doubts as to the meanings of Bidding Documents shall be communicated in writing to the Director of Capital Planning and Development for interpretation no later than five (5) working days before the hour and date set for the bid opening. Any interpretations will be in the form of an Addendum to the Bidding Documents that will be forwarded to all Bidders of record and sent to all other locations identified in the Invitation to Bid where documents are made available.

PART 8 REJECTION OF BIDS

8.1 The Chancellor reserves the right to reject any or all bids, to waive technicalities or to advertise for new bids, if in his/her judgment, the best interests of the State will be promoted thereby. The Chancellor reserves the right to reject the bid of a Bidder who is not in a position to perform the Contract.

8.2 The Chancellor reserves the right to waive any informality in bids received, if in the best interest of the CCSNH.

8.3 The Chancellor reserves the right to reject any Bidders not meeting all stated requirements.

PART 9 CONTRACT BOND

9.1 The successful Bidder, at the time of the execution of the Contract, must deposit with the Chancellor, Surety in the sum equal to one hundred percent (100%) of the amount of the Contract as required by RSA 447:16. The form of Bond shall be that provided for by the CCSNH and the Surety shall be acceptable to the Chancellor. The Contract Bond must be written by a Company licensed to do business in New Hampshire at the time the policy is issued. In addition, the Company issuing the bond shall be listed on the current list of "Surety Companies Acceptable on Federal Bonds" as published by the U.S. Department of the Treasury, Financial Management Services, Circular Number 570. see http://www.fms.treas.gov/c570/index.html

PART 10 CONTRACTOR'S AND SUBCONTRACTOR'S INSURANCE

10.1 The Contractor shall deliver to the Chancellor at the time of submitting a signed Contract, certificates of all insurance required hereunder. The certificates of insurance shall contain a description of the project, including the project name and number, and shall state that the companies issuing insurance will mail to the Chancellor thirty (30) days' notice of cancellation, alteration of material change of any listed policies or ten (10) days in cases of non-payment of premium. The Contractor shall keep in force the insurance required herein for the period of the Contract, through the Warranty period. and Owners and Contractors Protective (OCP) Liability coverage shall be kept in force through the date of Substantial Completion, or longer at the Director of Capital Planning and Development's direction. The Contractor shall have a continuing duty to provide new certificates of insurance as policies are amended or renewed. At the request of the Chancellor, the Contractor shall promptly make available a copy of any and all listed insurance policies. The required insurance must be written by a Company licensed to do business in the State of New Hampshire at the time the policy is issued. In addition, the company must have a rating of no less than A- based on the current A.M. Best with a size of VIII and satisfying and the terms and conditions described below or the minimum limits required of the Prime Contractor under the Contract Documents.

10.2 Prior to the start of the Contractor's Work, the Contractor and any subcontractors, consultants or third parties approved to perform Services pursuant to this contract, will carry, in full force and effect during the entire term of this Agreement, insurance with a carrier rated at minimum "A-" by A.M. Best with a size of VIII and satisfying and the terms and conditions described below or the minimum limits required of Prime Contractor under the Contract Documents.

A. Commercial General Liability (CGL) with limits of Insurance of not less than $1,000,000 each occurrence and $2,000,000 Annual Aggregate.

.1) If the CGL coverage contains a General Aggregate Limit, such General Aggregate shall apply separately to each project.

.2) CGL coverage shall be written on ISO Occurrence form CG 00 01 (10/93) or a substitute form providing equivalent coverage and shall cover liability arising from premises, operations, independent contractors, products- completed operations, and personal and advertising injury.

.3) Owner and all other parties required of the Contractor, shall be included as insured's on the CGL, using ISO Additional Insured Endorsement CG 20 10 (11/85) or CG 2010 (10/93) **AND** CG 20 37 (10/01) or CG2033(10/01) **AND** CG2037 (10/01) or an endorsement providing equivalent coverage to the additional insured's. This insurance for the additional insured's shall be as broad as the coverage provided for the named insured Contractor. It shall apply as Primary and non-contributing Insurance before any other insurance or self-insurance, including any deductible, maintained by, or provided to, the additional insured.

.4) Contractor shall maintain CGL coverage for itself and all additional insured's for the duration of the project and maintain Completed Operations coverage for itself and each additional insured for at least 7 years after completion of the Work.

.5) If Contractor is performing snow removal the policy must include the addition of CG 22 92 12 07 for Snow Removal Operations Coverage or equivalent

10.3 Commercial Automobile Liability

.1) Business Auto Liability with limits of at least $1,000,000 for each accident.

.2) Business Auto coverage must include coverage for liability arising out of all owned, leased, hired and non-owned automobiles.

.3) Owner and all other parties required of the Contractor, shall be included as additional insured's on the auto policy.

10.4 Commercial Umbrella

.1) Umbrella limits must be at least $2,000,000.

.2) Umbrella coverage must include as insured's all entities that are additional insured's on the CGL and coverage shall be as broad as provided on the underlying coverages.

10.5 Workers Compensation and Employers Liability

.1) Employers Liability Insurance limits of at least $500,000 each accident for bodily injury by accident and $500,000 each employee for injury by disease.

.2) Where applicable, U.S. Longshore and Harborworkers Compensation Act Endorsement shall be attached to the policy.

.3) Where applicable, the Maritime Coverage Endorsement shall be attached to the Policy.

.4) All employees, including the Owner, partners and officers, shall provide proof of workers' compensation coverage prior to working on the job site.

10.6 Waiver of Subrogation

.1) To the fullest extent permitted by law, Contractor waives all rights against Owner and Architect and their agents, officers, directors and employees for recovery of damages to the extent these damages are covered by commercial general liability, commercial umbrella liability, business auto liability or workers compensation and employers liability insurance where acceptable by law.

10.7 Pollution Liability Insurance

.1) Pollution Limits with at least $1,000,000 each occurrence, claim or wrongful act with an aggregate of $1,000,000 for bodily injury, property damage, pollution or environmental harm arising out of the work, asbestos, lead, or silica related claims, claims arising out of microbial matter or bacteria, testing, monitoring, measuring operations or laboratory analyses, or liability arising out of treatment facility. If a motor vehicle is used in connection with the work,

the business automobile policy will include coverage at least as broad as ISO CA 99 48 and be endorsed to include Motor Carrier Act Endorsement MCS 90.

.2) The policy must meet all other insurance requirements applicable to general liability, including, but not limited to additional insured, waiver of subrogation and cancellation notification.

.3) If there is a retroactive date, claims made will apply back to the first date of services provided to the Owner.

.4) The coverage shall be effective for 5 years following completion of the engagement.

.5) Proof of Pollution Liability Insurance shall be provided on a certificate acceptable to the Owner.

10.8 Attached to each certificate of insurance shall be a copy of the Additional Insured Endorsement that is part of the Contractor's Commercial General Liability Policy. These certificates and the insurance policies required shall contain a provision that coverage afforded under the policies will not be canceled or allowed to expire until at least 30 days prior written notice has been given to the Owner. Any subcontractors, consultants or third parties performing services for Contractor as contemplated herein, shall also maintain insurance as required above. Notwithstanding the foregoing, the Owner, in its sole and absolute discretion and taking into account the scope and character of the Services to be provided by Contractor, may reduce the required liability insurance minimums. Such reduction in the required liability insurance minimum of Contractor

shall be evidence by a written instrument specifically referencing this Exhibit I and signed by the Owner.

10.9 The Contractor shall require each Subcontractor employed on the Project to maintain the coverage listed above unless the Contractor's insurance covers activities of the Subcontractor on the Project.

10.10 No operations under this Contract shall commence until certificates of insurance attesting to the above listed requirements have been filed with the Chancellor and a Notice to Proceed is issued.

A. 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 Chancellor a Certificate of Insurance evidencing the required coverages prior to commencement of any operations involving blasting or demolition or both.

B. From time to time, CCSNH may ask the contractor to secure Owner's and Contractor's Protective Liability (OCP) coverage for the benefit of the Community College System of New Hampshire.

1. Limits of Liability:
   a. $2,000,000 Each Occurrence
   b. $3,000,000 Aggregate

****** [OR] ******

   c. $2,000,000 Bodily Injury & Property

C. Property and Builder's Risk Insurance (Fire and Extended Coverage):

1. The Community College System of New Hampshire shall insure the work included in the Contract, including extras and change orders, on an "All Risk" basis, on 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 Community College System of New Hampshire 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.
2. CCSNH is not responsible to insure Contractor's owned or leased equipment/property.

D. General Insurance Conditions

1. Failure to secure and maintain, or add by endorsement, Owner and all subsidiaries, agents, and employees as required shall not act as a defense to the enforcement of the terms of this Contract. Any such insurance policy shall apply separately to each insured against whom claim is made or suit is brought and shall contain no provision which excludes coverage of a claim made by one insured under the policy against another insured under the policy.
2. Each policy shall contain a clause prohibiting cancellation or modifications of the policy earlier than thirty (30) days or ten (10) days in cases of non-payment of premium after written notice thereof has been received by CCSNH.

E. Indemnification:

1. To the fullest extent of the law the Contractor shall indemnify, defend, and hold harmless the Community College System of New Hampshire, its Officers, 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 or 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 Community College System of New Hampshire, which immunity is hereby reserved by the Community College System of New Hampshire. The covenant in paragraph I shall survive the termination of this Agreement.

F. Additional Insurance for Design/Build Contracts:

1. In addition to the insurance requirements listed in the above paragraphs, the Designer/Builder Team shall provide the following coverage.

a. The Designer/Builder Team, or the Designer shall purchase and maintain professional liability coverage for this project. The coverage shall provide the CCSNH with protection against design errors and omissions and shall have an annual aggregate limit of no less than $2,000,000. The coverage shall be maintained through the legal stature of repose period, currently stipulated to be three (3) years from the date of Substantial Completion. If the professional liability coverage is maintained by other than the firm holding the prime contract with the CCSNH for this project, the prime contractor shall provide evidence of indemnifications, approved by the CCSNH, that indicate that this insurance coverage is in place and available for the protection of the CCSNH. The indemnification may not create a re-assignment of contractual responsibilities between the CCSNH and the prime contractor.

PART 11 BIDDING DOCUMENTS

11.1 Bidders shall use only complete sets of Bidding Documents in preparation of bids; the CCSNH assumes no responsibility for mistakes due to the use of incomplete sets of Bidding Documents.

PART 12 SUBSTITUTIONS

12.1 Where Bidding Documents stipulate particular Products, substitution requests will ONLY be considered before receipt of Bids. Refer to specification section 01600 – Product Requirements.

PART 13 AWARD OF CONTRACT

13.1 The Contract will be Awarded as soon as possible to the Responsible Bidder on the basis of the Highest Score, see Score Sheet in Section 00300.

A. The CCSNH may request a Negotiated Price from the Highest Score Responsible Bidder.

13.2 The signed Contract, together with the Contract Bond, and certificate of insurance shall be returned to the CCSNH within 10 days after the date of notice that the Proposal has been accepted.

A. If the successful bidder fails to execute the Contract and submit acceptable bond and required attachments within 20 days after the date of notice of acceptance of the Proposal, the CCSNH may cancel the notice of award. Contract award may then be made to the next lowest responsible bidder or the Work may be re-advertised.

13.3 Prior to the issuance of Notice to Proceed, each Bidder shall be prepared, if so requested by the Chancellor, to present evidence of his/her experience, qualifications, and financial ability to carry out the terms of the Contract.

13.4 A Contract that has been Awarded with required attachments is not executed until submitted and approved by the CCSNH Board of Trustees, if required, and issuance of the Notice to Proceed by the CCSNH.

PART 14 PERMITS AND FEES

14.1 CCSNH shall secure and pay for all Permits and Fees required by the Work of this Contract.

END OF DOCUMENT 002004

SECTION 00300 – BID PROPOSAL FORM – CCSNH

PROPOSAL – STIPULATED BASE LUMP SUM GRAND TOTAL BID – GENERAL CONSTRUCTION

PROPOSAL TO: **Received no later than 3:00 PM, Tuesday, April 16th, 2019.**

Matthew Moore, PE
memoore@ccsnh.edu
Director of Capital Planning & Development
Community College System of New Hampshire
26 College Drive
Concord, New Hampshire 03301

SUBJECT: Project # RVC 19-02
Parking Lot Re-Paving

1. CERTIFICATION: The undersigned Prime Contractor

   Name of Firm: _____

   Signature:_____

   Name and Title:_____
   (Contractor's Name Printed Here)

   certifies that they have examined and fully comprehend the requirements and intent of the Bidding and Contract Documents for this Project, including any and all Addenda issued, and also certifies that they have visited the location of the Project work and examined all conditions at the site which will affect the work.

2. BASE BID (STIPULATED LUMP SUM GRAND TOTAL)

   The undersigned Contractor proposes to furnish all labor, materials, equipment, services and related items necessary for, or incidental to, the proper execution and completion of the Work in strict conformance with the Bidding and Contract Documents, on or before the time of completion specified, for the Stipulated Sum for Materials plus Labor of:

   LUMP SUM GRAND TOTAL BID AMOUNT:

   _____
   (Words)

   _____DOLLARS ($_____)
   (Figures)

3. ADDENDUM RECEIPT

The undersigned Contractor acknowledges the receipt of the following Addenda to the Bidding and Contract Documents, but he agrees that he is bound by all Addenda, whether or not listed herein:

Addendum No._____Dated:_____

Addendum No._____Dated:_____

Addendum No._____Dated:_____

STATEMENT OF NON-COLLUSION

By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of his knowledge and belief: (1) The prices in this bid have been arrived at independently without collusion, consultation, communications, or agreement, for the purpose of restricting competition as to any matter relating to such prices with any other bidder or with any competitor; (2) Unless required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any other competitor, and (3) No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

SIGNATURE:_____

NAME:_____

TITLE:_____

DATE:_____

PHONE:_____

EMAIL:_____

Corporate Seal:

DOCUMENT 00708

GENERAL CONDITIONS – COMMUNITY COLLEGE SYSTEM OF NEW HAMPSHIRE (CCSNH)

PART 1 DEFINITIONS

A. **Addendum.** Written and/or graphic information issued before opening *Proposals* that modifies or interprets the *Bidding Documents* by additions, deletions, clarifications or corrections.

B. **Advertisement.** A public announcement in the form of an *Invitation to Bid*, inviting *Bids* for *Work* to be performed and/or *Materials* to be furnished.

C. **Alteration Order.** A written agreement between the *Contractor* and the *Community College System of New Hampshire* that amends the *Contract* and identifies *Work* that affects either the *Contract Sum, Completion Date*, *Credit,* or any combination thereof.

D. **Alternate.** A proposed change in the *Work* described in the *Contract Documents* providing the *Community College System of New Hampshire* with an option to select between alternative materials, products or systems, or to add or delete portions of *Work*.

E. **Architect.** As defined in RSA 310-A:28, a person who, by reason of having acquired through professional education and practical experience an advanced training in building construction and architectural design and an extensive knowledge of building standards created to safeguard the public from hazards such as fire, panic, structural failure, and unsanitary conditions, is technically and legally qualified to practice architecture and who is licensed by the State of New Hampshire Board of Licensure for Architects to engage in the practice of architecture. The Architect has no contractual agreement with the *Contractor* and therefore shall not directly interact with the *Contractor*.

F. **Award.** The acceptance of a *Bid* prior to execution of *Contract*.

G. **Bid.** A complete and properly signed *Proposal*, submitted in accordance with the *Bidding Requirements*, to perform the *Work* for the amount or amounts stipulated therein.

H. **Bid Bond.** One form of a *Proposal Guaranty* executed by the *Bidder* and a *Surety* to guarantee that the *Bidder* will enter into a *Contract* within a specified time.

I. **Bid Opening Officer.** An authorized representative of the Community College System of New Hampshire, who is responsible for opening and reading of *Bids*.

J. **Bidder.** A *Corporation*, *Partnership*, or *Proprietorship* submitting a *Proposal*, subsequent to meeting the Community College System of New Hampshire's *Bidding Requirements*.

K. **Bidding Documents.** Collectively, the *Invitation to Bid, Bidding Requirements, Specifications, Drawings,* and *Addendum*.

L. **Bidding Requirements.** The documents that contain information regarding bidding procedures with which a *Bidder* must conform and a *Proposal* that a *Bidder* shall use to submit a *Bid*.

M. **Builders Risk Insurance.** A specialized form of property insurance that provides coverage for loss or damage during the course of construction.

N. **Calendar Day.** A day shown on the calendar.

O. **Certificate of Occupancy.** A document issued by the Office of the State Fire Marshal or its authorized representative certifying that all of, or a designated portion of a building, is approved for its designated use.

P. **Certificate of Full or Partial Substantial Completion.** A document prepared by the *Community College System of New Hampshire* when the *Project* reaches *Substantial Completion and only* issued after review and acceptance of the *Contractor's Request for Certificate of Full or Partial Substantial Completion.*

Q. **Chancellor.** The Chancellor of the Community College System of New Hampshire.

R. **Change Order.** A written agreement between the *Contractor* and the *Community College System of New Hampshire* that identifies *Work* to be completed as part of an Allowance Item. Any change that affects either the *Contract Sum*, Contract Time or *Credit* shall be processed as an *Change Order*.

S. **Clerk of the Works.** An authorized representative identified by the *Community College System of New Hampshire*, responsible for observing construction on the *Community College System of New Hampshire*'s behalf for conformance with the *Contract Documents*.

T. **College.** The college who is responsible for the facility and/or will occupy the facility after and/or during the Work. The College(s) has/have no contractual agreement with the *Contractor* and therefore shall not direct the *Contractor* in any way.

U. **Commercial General Liability Insurance.** A broad form of liability insurance covering claims for bodily injury and property damage which combines under one policy coverage for business liability exposures, except those specifically excluded.

V. **Completion Date.** The last day of the time allotted or the specific date established as identified in the *Contract Documents* for *Substantial Completion* of the *Work*, including any authorized extensions.

W. **Consultant.** The *Architect*, *Engineer*, and/or professional engaged to develop/provide *Drawings, Specifications* and/or other services for the *Project*. The Consultant has no contractual agreement with the *Contractor* and therefore all interaction between any Consultant and the *Contractor* shall be done thru the *Contract Representative*.

X. **Contract.** The written agreement between the *Community College System of New Hampshire* and the *Contractor* setting forth the obligations of the parties as outlined in the *Contract Documents*.

Y. **Contract *Representative*.** The *Community College System of New Hampshire's* appointed representative is the CCSNH Director of Capital Planning and Development having specific authority to act on the *Community College System of New Hampshire's* behalf and shall be responsible for general supervision, control, and direction over all matters pertaining to design, construction, maintenance standards, preservation, and administration of the *Contract*. The Architect does not have such authority.

Z. **Contract Bond.** The approved form of security to the Community College System of New Hampshire (political subdivision) in compliance with RSA 447:16 executed by the *Contractor* and their *Surety* or Sureties, guaranteeing complete execution of the contract and all supplemental agreements pertaining thereto including the payment of all legal debts pertaining to the construction of the *Project*.

AA. **Contract Documents.** Collectively, the *Invitation To Bid, Bidding Requirements, Contract Bond, Specifications, Drawings, Addendum,* and other documents included in the *Contract*, and modifications, clarifications, authorized *Alteration Orders* and *Change Orders* issued after the execution of the *Contract,* to complete the *Project*. All documents shall be written in English.

BB. **Contract Sum.** The amount stated in the *Contract*. This sum shall be derived from the *Lump Sum Base Bid, Lump Sum Grand Total,* or *Negotiated Price*; modified to reflect the acceptance of any *Alternates*. The *Notice to Proceed* shall state the amount that the *Community College System of New Hampshire* is obligated to pay the *Contractor*.

CC. **Contractor.** The *Corporation, Partnership,* or *Proprietorship,* or any combination thereof, contracting with the Community College System of New Hampshire for performance of prescribed work.

DD. **Contractor's Request for Certificate of Full or Partial Substantial Completion.** A document prepared by the *Contractor* when the *Project* reaches *Substantial Completion*.

EE. **Contractual Liability.** Liability assumed by the *Contractor* under a *Contract*.

FF. **Corporation.** A legal entity organized under the laws of a particular jurisdiction who is legally authorized to do business in the State.

GG. **Credit.** Any Change that results in a reduction in the *Contract Sum* or *Lump Sum Grand Total* Items. All credits shall be processed by an *Alteration Order* and may include modifications to *Lump Sum Grand Total* Items.

HH. **Day.** Unless designated as a *Working Day,* or unless otherwise indicated, this term will mean a *Calendar Day*.

II. **Drawings (Plans).** The graphic and pictorial documents or reproductions thereof, which show the location, character, dimensions, and details of the prescribed work.

JJ. **Final Completion.** Term denoting that the *Work* has been completed in accordance with the terms and conditions of the *Contract Documents* and all *Punch List* items have been completed.

KK. **Final Payment.** Payment made by the *Community College System of New Hampshire* to the *Contractor*, upon *Final Completion*.

LL. **General Conditions.** The part of the *Contract Documents* establishing the rights, responsibilities and relationships of the parties.

MM. **Hazardous Material.** Shall include any material regulated by federal or state law and shall include but not limited to asbestos, toxic or hazardous waste, PCBs, combustible gases and materials, petroleum or radioactive material, or any other substances under any conditions and in such quantities as would pose a substantial danger to persons or property exposed to such substances.

NN. **Indemnification.** A contractual obligation by which one person or entity agrees to reimburse others for loss or damage arising from specified liabilities.

OO. **Invitation to Bid.** A portion of the *Bidding Documents*; the *Advertisement* for *Proposals* for *Work* or *Materials* on which *Bids* are requested. The *Advertisement* will indicate the time and place of the opening of *Proposals*, the type and location of *Work* to be performed, the character and quantity of the *Material* to be furnished and provide information on how to obtain *Drawings, Specifications* and *Proposal.*

PP. **Liability Insurance.** A contract under which an insurance company agrees to protect a person or entity against claims arising from a real or alleged failure to fulfill an obligation or duty to a third party who is a named or an incidental beneficiary.

QQ. **Lump Sum Base Bid.** One type of *Proposal* where the *Bid* is established by a single item price to perform all *Work* excluding any *Alternates* that may or may not become part of the *Contract*.

RR. **Lump Sum Grand Total.** One type of *Proposal* where the *Bid* is established as a total of various items to perform all *Work* excluding any *Alternates* that may or may not become part of the *Contract*.

SS. **Low Bid.** The *Bid* stating the lowest price proposed for performance of the *Work*, conforming to the *Bidding Documents*.

TT. **Lowest Responsible Bidder.** The *Bidder* who submits the lowest bona fide *Bid* and is considered by the Community College System of New Hampshire to be fully responsible and qualified to perform the *Work* for which the *Bid* is submitted.

UU. **Material(s).** Any substance and/or product specified for use in the construction of the *Project* and its appurtenances.

VV. **Negotiated Price.** A *Proposal* modified by the *Lowest Responsible Bidder* thru communication with the Community College System of New Hampshire in which changes are made to the *Proposal* and/or *Completion Date* as required to meet budget, funding or scheduling requirements.

WW. **Notice to Proceed.** A written notice to the *Contractor* to proceed with a portion of or all of the Contract Work; including the beginning of *Contract* time when applicable. The Notice to Proceed shall act as the final step in awarding the *Contract* or portion thereof.

XX. **Occurrence Policy.** An insurance policy that covers acts or omissions occurring during the policy term, regardless of when a claim against the insured is first asserted, even if the policy is no longer in existence.

YY. **Owner's Protective Liability Coverage.** Third-party legal liability insurance coverage protecting the *Community College System of New Hampshire* from claims arising from the construction process.

ZZ. **Partnership.** An association of two or more persons or entities to conduct a business that shares profits and losses at a certain proportion.

AAA. **Professional Engineer.** Referred to as Engineer. As defined in RSA 310-A:2, a person who by reason of advanced knowledge of mathematics and the physical sciences, acquired by professional education and practical experience, is technically and legally qualified to practice engineering, and who is licensed by or otherwise authorized by State of New Hampshire Professional Engineers Board to engage in the practice of engineering. The Engineer has no contractual agreement with the *Contractor* and therefore shall not directly interact with the *Contractor*.

BBB. **Project.** The total construction of the *Work* to be performed.

CCC. **Proposal.** A *Bidder's* offer, on *Community College System of New Hampshire* prescribed forms, to perform stated work at the quoted price(s).

DDD. **Proposal Guaranty.** The security furnished with a *Proposal*, which shall be a *Bid Bond*, certified check or cashier's check and which provide that the *Bidder* if awarded the *Contract* will execute such *Contract* in accordance with the requirements of the *Bidding Documents*.

EEE. **Proprietorship (Individual).** A form of business organization that is owned entirely by one person.

FFF. **Provide.** To furnish and install a product, materials, systems, and/or equipment, complete in place, fully tested and approved.

GGG. **Punch List.** A written document attached to the *Certificate of Substantial Completion* listing items to be completed or corrected prior to the *Community College System of New Hampshire* approval of *Final Payment.*

HHH. **Specifications.** The volume that is part of the *Contract Documents* which contain the *General Conditions*, *Supplementary General Conditions*, *Invitation to Bid*, and individual sections that consist of written requirements for material, equipment, construction systems, standards and workmanship, and other documents or reports as applicable.

III. **State.** The State of New Hampshire.

JJJ. **Subcontractor.** A *Corporation*, *Partnership*, *Proprietorship*, Joint Venture or any combination thereof, to whom the *Contractor* sublets any part of the *Contract*.

KKK. **Substantial Completion.** As determined by an inspection by the *Contract Representative* that the work or portion thereof is substantially complete, in accordance with the *Contract Documents*, such that the *Community College System of New Hampshire* may occupy or utilize the *Work* for its intended use without disruption or interference by the *Contractor* in completing or correcting any remaining unfinished or unacceptable *Work.*

LLL. **Substitution.** A *Material*, product or item of equipment in place of that specified.

MMM. **Superintendent.** The *Contractor's* authorized representative responsible for field supervision, coordination, and completion of the *Work*.

NNN. **Supplementary General Conditions.** A part of the *Contract Documents* which supplements and may also modify, change, add to or delete from provisions of the *General Conditions*.

OOO. **Surety.** A *Corporation*, *Partnership*, or *Proprietorship* other than the *Contractor*, executing a bond furnished by the *Contractor*.

PPP. **Umbrella Liability Insurance.** Insurance providing coverage in an amount above existing liability policies.

QQQ. **Unit Price.** An amount stated in a *Lump Sum Grand Total Bid* as a price per unit for an item or portion of the contract or for specific materials and/or services described in the *Contract Documents*.

RRR. **Work.** The construction and services required by the *Contract Documents* to furnish all labor, materials, equipment, and incidentals necessary to complete the duties, obligations, and requirements imposed by the *Contract*.

SSS. **Workers' Compensation Insurance.** Insurance covering the liability of an employer to employees for compensation and other benefits required by workers' compensation laws with respect to injury, sickness, disease or death arising from their employment.

TTT. **Working Day.** Any calendar day, except Saturdays, Sundays, and Contract designated legal holidays.

PART 2 CONTRACT DOCUMENTS

2.1 The Contract Documents consist of the Invitation to Bid, Contract Agreement, General Conditions, Supplementary General Conditions, Drawings and Specifications, including all Addenda issued prior to execution of the Contract, wage scales where applicable, Bonds where required, insurance certificates, other documents listed in the Agreement and Modifications issued after the execution of the Contract, Change Orders and Alteration Orders issued in accordance with Part 12 of the General Conditions.

A. Hierarchy of the Contract Documents shall be interpreted according to the following classes:
   1. Community College System of New Hampshire approved modifications to the Contract Documents after execution of the Contract.
   2. Addenda.
   3. Supplemental General Conditions.
   4. General Conditions.
   5. Division 1 – General Requirements.
   6. Remaining Specifications.
   7. Larger Scale Drawings & Details.
   8. Remaining Drawings.

2.2 A fully executed Contract shall not be in effect until the contract is approved and an issuance of the Notice to Proceed by the Community College System of New Hampshire.

2.3 This Contract is executed in a number of counterparts, each of which is an original and constitutes the entire agreement between the parties. This Contract shall be construed according to the laws of the State. No portion of this Contract shall be understood to waive the sovereign immunity of the *Community College System of New Hampshire*. This Contract shall not be amended, except as specified in Parts 13 and 20.

2.4 The Contract Documents are complementary and anything called for by one of the Contract Documents and not called for by the others shall be of like effect as if required by all.

2.5 Should the Contract Documents contain inconsistencies within a class identified in Item 2.1A, the Contractor shall provide the better quality or greater quantity of work and/or materials. The Contractor shall identify any perceived discrepancies to the Contract Representative prior to proceeding.

2.6 The Contractors and all Subcontractors shall refer to all of the Contract Documents, including those not specifically showing the work of their specialized trades, and shall perform all work reasonably inferable from them as being necessary to produce the intended results in compliance with applicable Federal, State, and Local codes.

2.7 All indications or notations which apply to one of a number of similar situations, materials or processes shall be deemed to apply to all such situations, materials or processes wherever they appear in the work, except where a contrary result is clearly indicated by the Contract Documents.

2.8 Where codes, standards, requirements, and publications of public and private bodies are referred to in the Contract Documents, such references shall be understood to be to the latest final and complete

revision at the time of receiving Bids unless specifically identified, except where otherwise indicated.

2.9 Where no explicit quality or standards for materials or workmanship is established for work, such work is to be consistent with the best quality workmanship standards of the applicable trade.

2.10 All manufactured articles, materials, and equipment shall be applied, assembled, installed, connected, erected, tested, cleaned, and conditioned in accordance with the manufacturer's written or printed directions and instructions, unless specifically indicated otherwise in the Contract Documents.

2.11 The Drawings are made to scale as identified therein, but all working dimensions shall be taken from the figured dimensions and by actual measurements at the job; in no case by scaling. The Contractor shall study and compare all of the Drawings and verify all figures before laying out or constructing work. The Contractor shall be responsible for errors in his/her work that might have been avoided thereby. Whether or not an error is believed to exist, deviation from the Drawings and the dimensions given thereon shall be made only after approval in writing from the Contract Representative.

2.12 All Drawings and Specifications and copies thereof are the property of the Community College System of New Hampshire and shall not be used by the Contractor or Subcontractor on other Projects.

PART 3 NOTICE

3.1 Any written notice by either party to the Contract shall be sufficiently given if delivered to or at the last known business address of the person, partnership or corporation constituting the other party to the Contract, or to his/her, their, or its duly authorized agent, representative, or officer, or when sent by registered mail to such last known business address. The last known business address shall be that location which is last provided in writing.

3.2 The parties shall provide their physical location/address, mailing address, telephone number, fax number, and, where available, pager number(s), email address(es), and other methods of contact for all persons associated with the Contract.

PART 4 ACCESS TO THE WORK

4.1 The Contractor shall provide for access to the work, at all times, for observation and/or inspection by the Community College System of New Hampshire, Architect, Consultant, Engineer and government officials having jurisdiction. The Contractor shall provide proper facilities for such access and inspection.

PART 5 ACCIDENT PROTECTION

5.1 It is a condition of this Contract, and shall be made a condition of each subcontract entered into pursuant to the Contract, that the Contractor, any Subcontractors, or Independent Contractors shall not require any laborer or mechanic employed in the performance of the Contract to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous to the laborer's health or safety as determined by construction safety and health standards of the Occupational Safety and Health Administration, United States Department of Labor, which standards include, by reference, the established Federal Safety and Health Regulations for Construction. These standards and regulations comprise Part 1910 and Part 1926 respectively of Title 29 of the Code of Federal Regulations, as may be revised from time to time. In the event any revisions in the Code of Federal Regulations are published, such revisions will be deemed to supersede the appropriate Part 1910 and Part 1926, and be effective as of the date set forth in the revised regulation.

PART 6 HAZARDOUS MATERIALS

6.1 The Contractor shall also be aware of laws and regulations relating to hazardous materials that may be encountered during construction operations, either within project limits or at material sites off the project. The health and safety of employees, the general public, and the potential of damage to the overall environment is possible if hazardous materials are not recognized, reported, and the appropriate action taken to dispose of, remove from the site, or otherwise contain the possible contaminants.

6.2 If any abnormal condition is encountered or exposed that indicates the presence of a hazardous material or toxic waste, construction operations shall be immediately suspended in the area and the Contract Representative notified. No further work shall be conducted in the area of the contaminated material until the site has been investigated and the Community College System of New Hampshire has given approval to continue the work in the area. The Contractor shall fully cooperate with the Community College System of New Hampshire and perform any remedial work as directed. Work shall continue in other areas of the Project unless otherwise directed.

6.3 Exposure to hazardous materials may result from contact with, but not necessarily limited to, such items as drums, barrels, and other containers, waste such as cars, batteries, and building construction debris. Containers leaking unknown chemicals or liquids, abandoned cars leaking petroleum products, batteries leaking acid, construction debris which may include asbestos, or any other source of suspected hazardous material found within excavation areas or stockpiled on land within construction limits shall be referred to the Department of Environmental Services and Contract Representative so that a proper identification of the materials may be made and disposal procedures initiated as required.

6.4 Disposition of the hazardous material or toxic waste shall be made under the requirements and regulations of the Department of Environmental Services. Work required to dispose of these materials and any remedial work shall be performed under a Supplemental Agreement or Contract item, if included in the Contract.

PART 7 SUBCONTRACTS

7.1 Nothing contained in the Specifications or Drawings shall be construed as creating any contractual relationship between any Subcontractor and the Community College System of New Hampshire. The Sections of the Specifications are not intended to control the Contractor in dividing the work among Subcontractors or to limit the work performed by any trade.

7.2 The Contractor shall be as fully responsible for the acts and omissions of Subcontractors and of persons employed by them, as he/she is for the acts and omissions of persons directly employed by him/her.

7.3 The Contractor shall, without additional expense to the Community College System of New Hampshire, utilize the services of specialty Subcontractors, as required to complete the work.

7.4 The Contract Representative will not undertake efforts to settle or resolve any differences between the Contractor and Subcontractors or between Subcontractors.

7.5 The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind Subcontractors to the Contractor by the terms of the General Conditions and other Contract Documents insofar as applicable to the work of Subcontractors and to give the Contractor the same power to terminate any subcontract that the Contract Representative may exercise over the Contractor under any provisions of the Contract Documents.

PART 8 RESPONSIBILITY OF CONTRACTOR TO ACT IN EMERGENCY

8.1 In case of any emergency that threatens loss or injury of property, and/or safety of life, the Contractor shall act as the situation may warrant. He/she shall notify the Contract Representative thereof immediately thereafter. Any compensation claimed by the Contractor together with substantiating documents in regard to expense, shall be submitted to the Contract Representative and the amount of compensation shall be determined by agreement.

8.2 In the event the Community College System of New Hampshire learns of an emergency that threatens loss or injury of property, and/or safety of life, the Community College System of New Hampshire shall notify the Contractor using the contact information provided pursuant to PART 3 herein. The Community College System of New Hampshire may, but shall have no duty to take reasonable steps to mitigate the damage or loss to the Contractor. In either event, the Community College System of New Hampshire shall have no duty to undertake any specific acts and shall have no liability for actions or inactions taken absent gross negligence.

PART 9 MUTUAL RESPONSIBILITY OF CONTRACTORS

9.1 If the Contractor or any of his/her Subcontractors or employees causes loss or damage to any separate Contractor or Subcontractor on the work, the Contractor or Subcontractor agrees to settle with such separate Contractor or Subcontractor by agreement, if he/she will so settle. If such separate Contractor or Subcontractor sues the Community College System of New Hampshire because of any loss so sustained, the Contract Representative shall notify the Contractor and/or their Subcontractors, who shall indemnify and hold harmless the Community College System of New Hampshire against any expenses or judgment arising therefrom.

PART 10 PAYMENTS TO CONTRACTOR

10.1 The Community College System of New Hampshire will process payments to the Contractor each month on the basis of duly certified and approved estimates of the work performed during the preceding period. In preparing estimates, the material delivered on the site and any preparatory work done may be taken into consideration. Payments will only be approved in an amount no greater than the percentage of project completion, as determined by the Contract Representative.

10.2 At least ten (10) days before the end of the billing period, the Contractor shall submit to the Contract Representative, an itemized Requisition for Payment, supported by such data substantiating the Contractor's right to payment as the Contract Representative may require. If payment is to be made for materials or equipment not incorporated in the work, but delivered and suitably stored at the site, or at some other location agreed upon in writing, such payment shall be conditional upon inspection and/or observation by the Community College System of New Hampshire and submission by the Contractor of bills of sale or such other procedure satisfactory to the Contract Representative to establish the Community College System of New Hampshire's title to such materials or equipment or otherwise protect the Community College System of New Hampshire's interest including applicable insurance and transportation to the site.

10.3 Immediately upon receipt of the Monthly Requisition for Payment, Contractor shall post same at the Contractor's Field Office or project site in a location where Subcontractors have clear access.

10.4 Retainage:

A. Contract Payment Withheld: A 5% retainage shall be withheld from each Progress Payment until issuance of a Certificate of Substantial Completion. The balance remaining after the specified percentage has been retained, less all previous payments, will be certified for payment on each partial estimate.

****** [OR] ******

B. Irrevocable Letter of Credit: In lieu of retainage for Projects amounting to Five Hundred Thousand ($500,000.00) or more, the Contractor, with the approval of the Community College System of New Hampshire, may provide the Community College System of New Hampshire with a Letter of Credit in an amount equal to five percent (5%) of the total adjusted Contract amount at the time of such request. Any such Letter of Credit must be irrevocable (that is, it may be modified or revoked only with the consent of the Community College System of New Hampshire). It shall have a termination date at least one hundred twenty (120) days after the completion date specified in the underlying Contract, or as may be altered in accordance with the Contract Documents, whichever is later. The Letter of Credit shall authorize the Community College System of New Hampshire to require the issuing financial institution to deposit with the Community College System of New Hampshire an amount equal to the retainage that would have been deducted from payment to the Contractor, as specified in 10.4.A.1. The Community College System of New Hampshire may utilize the amount so deposited in the same manner as retainage.

10.5 Retainage will be released at Final Payment.

A. After the Certificate of Substantial Completion has been issued, upon written application by the Contractor and with the approval of the Surety, the Contract Representative may release a portion of the retained amount.

10.6 Payment for Material On Hand:

A. Partial payments are made for materials to be incorporated in the Work, provided the materials meet the requirements of the Contract and are delivered on, or in the vicinity of, the Project site and stored in acceptable places. Partial payments will not exceed 90 percent of the Contract unit price for the item or the amount supported by copies of paid invoices, freight bills, or other supporting documents required by the Community College System of New Hampshire. The quantity paid will not exceed the corresponding quantity estimate in the Contract. No partial payment will be made on living or perishable materials until incorporated in the Work.

B. When material payments exceed $100,000 or 10 percent (10%) of the total contract amount, whichever is less, notarized copies of paid invoices or copies of canceled checks for all such materials must be submitted to the Contract Representative within 45 days of the end date of the estimate on which the material allowance was paid. Failure to provide such documentation will result in the deduction of such material allowance from future estimates until documentation is provided.

C. All material and work covered by partial payments made shall thereupon become the sole property of the Community College System of New Hampshire, but this provision shall not be construed as relieving the Contractor of the sole responsibility of all materials and work upon which payments have been made or the restoration of any damaged work or as a waiver of the right of the Community College System of New Hampshire to require the fulfillment of all the terms of the Contract.

10.7 Payment for Material Not on Hand:

A. Upon receipt of a written request by the Contractor, partial payment may be made for acceptable, fully-fabricated, nonperishable materials not delivered that are unique to the Project provided the materials meet the requirements of the Contract and are stored in excess of 30 days at locations approved by the Community College System of New Hampshire, and provided all required certificates of compliance, mill test reports, shop inspector's acceptance and any other required materials certification have been furnished. Materials shall be identifiable and accessible for inspection. Storage areas shall provide adequate protection so that such materials will meet the Contract requirements upon delivery to the site.

B. Partial payment will be based on the actual cost to the Contractor as indicated on invoices furnished to the Contract Representative. When material payments exceed $100,000 or 10 percent of the total contract amount, whichever is less, notarized copies of paid invoices or copies of canceled checks for all such materials must be submitted to the Contract Representative within 45 days of the end date of the estimate on which the material allowance was paid. Failure to provide such documentation will result in the deduction of such material allowance from future estimates until documentation is provided. Payment shall not exceed 90 percent of the bid price. NO payment will be made on materials for any item in the contract whose total dollar value is less than $5,000. Approval of partial payment will not constitute final acceptance of the materials for use in completing items of work.

10.8 Release of Claims:

A. Neither the final payment nor any part of the retained percentage shall become due until the Contractor shall deliver a complete release of all claims arising under and by virtue of this Contract, including claims for all Subcontractors and suppliers of either materials or labor, plus a release of the Contract Bond and a statement that all Subcontractors and suppliers have been paid. The Commissioner, may pay any and all such claims, in whole or in part, and deduct the amount or amounts so paid from any partial or final payment.

10.9 Final Payment:

A. Application for Final Payment received from the Contractor will be processed for payment not less than 90 days after project acceptance and final completion unless accompanied by a release of the Contract Bond. This payment shall be the amount of the Contract, amended by approved alteration orders, less previous payments minus liquidated damages, additional penalties or holdbacks. All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

10.10 Acceptance of Final Payment Constitutes Release:

A. The acceptance of the Final Payment by the Contractor shall be and shall operate as a release to the Contractor of all claims and of all liability to the Community College System of New Hampshire for all things done or furnished in connection with this work. No payment, however, final or otherwise, shall operate to release the Contractor and its Sureties from any obligations under this Contract or the Contract Bond. Acceptance of Final Payment shall not impact any warrantees provided by the Contractor with respect to this project.

PART 11 CONTRACTOR'S TITLE TO MATERIALS

11.1 No materials or supplies for the work shall be purchased by the Contractor or any Subcontractor subject to any chattel mortgage or under a conditional sale or other agreement by which an interest is retained by the seller. The Contractor warrants that good title has been obtained for all materials and supplies for which partial payment has been accepted. If any claim is made with respect to materials provided by the Contractor, Subcontractors, or Independent Contractors, the Contractor shall defend any such claim and shall pay any judgment or settlement thereon.

PART 12 CHANGES IN WORK

12.1 No charge for any extra work or material will be allowed without a fully executed Alteration Order. (Refer to Specification Section 01200-Price and Payment Procedures)

12.2 The Commissioner 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 the Contract and within the general scope thereof.

12.3 If any part of the work as installed be at variance with the Contract requirements, the Contract Representative may allow all or any part of such work to remain in place, if found to be in the best interest of the Community College System of New Hampshire, subject to proper adjustment in the

Contract Price. Acceptance of installed work in one instance or in any instance does not constitute a waiver of Specifications, General Conditions or contract requirements.

12.4 The Contractor shall hold the Community College System of New Hampshire and its officers, agents, servants, and employees harmless from liability of any nature including cost and expenses, for or on account of any patented or unpatented invention, process, article or applicable items manufactured or used in the performance of the Contract, including its use, unless otherwise specifically stipulated in the Contract Documents.

PART 13 ASSIGNMENTS

13.1 The Contractor shall not assign the whole or any part of this Contract or any monies due or to become due, hereunder, without the written consent of the Commissioner and of all Sureties executing any Bonds on behalf of the Contractor if in connection with said Contract.

PART 14 SUPERINTENDENCE BY CONTRACTOR

14.1 The Contractor shall have on the project site, at all times when work is being performed, a competent English speaking Superintendent capable of reading and thoroughly understanding the contract documents and thoroughly experienced in the type of work being performed, satisfactory to the Community College System of New Hampshire. The Contractor shall not change superintendents without permission from the Contract Representative and shall submit a request in writing with justification for such a change.

A. The Superintendent shall be responsible for verifying that all materials, installation, coordination, and workmanship are in conformance with the contract documents.

B. Unless the Contract Representative has granted prior written approval, the Superintendent shall not, himself, engage in "hands-on" construction work.

C. In the event the Superintendent fails or refuses to perform functions mentioned above as determined by the Contract Representative, the Contractor agrees to a stipulated penalty of $1,200.00 per day, in addition to any liquidated damages provided hereunder.

PART 15 FAILURE TO COMPLETE WORK ON TIME

15.1 If the Contractor fails to complete all of the work or sections of the Project, if sections are indicated, within the time specified in the Contract or within any additional time allowed, for each working day the Liquidated Damages identified in 16.3 will be deducted from any money due the Contractor. This deduction will be made, not as a penalty, but as fixed, agreed liquidated damages for inconvenience to the Community College System of New Hampshire and for reimbursing the Community College System of New Hampshire the cost of the Administration of the Contract, including personnel, time, engineering and inspection. Should the amount of money otherwise due the Contractor be less than the amount of such liquidated damages, the Contractor and its Surety shall be liable to the Community College System of New Hampshire for such deficiency.

15.2 If the Community College System of New Hampshire permits the Contractor to continue and finish the work after the time fixed for its completion, it shall in no way operate as a waiver on the part of the Community College System of New Hampshire of any of its rights under the Contract. When the final acceptance has been duly made by the Contract Representative, any liquidated damage charges shall end.

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

Original Contract Amount, Plus Any Extras, Alteration Orders, and Alternates		Amount of Liquidated Damages Per Working Day
From More Than:	To and Including:	
$0	$25,000.00	$200.00
$25,000.00	$50,000.00	$250.00
$50,000.00	$100,000.00	$400.00
$100,000.00	$500,000.00	$450.00
$500,000.00	$1,000,000.00	$800.00
$1,000,000.00	$2,000,000.00	$1,200.00
$2,000,000.00	$5,000,000.00	$1,600.00
$5,000,000.00	$10,000,000.00	$2,000.00
$10,000,000.00	and above	$2,400.00

PART 16 SUBSTANTIAL COMPLETION AND FINAL INSPECTION

Revised 12/08/04

16.1 The Contractor shall provide a signed Substantial Completion Application to the Contract Representative when the work is believed to be substantially complete, in accordance with specification section 01700, accompanied by a list of items, referred to as the Punch List, to be completed or corrected. The failure to include any items of 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 Contract Representative who determines that the work is substantially complete, a Certificate of Substantial Completion will be issued.

A. The Certificate of Substantial Completion shall:
   1. Include any modifications to the Punch List or value as determined by the Contract Representative.
   2. Establish the Date of Substantial Completion.
      a. Warranties required by the Contract Documents shall commence on the Date of Substantial Completion unless otherwise provided in the Certificate of Substantial Completion.
   3. Identify the responsibilities of the Community College System of New Hampshire and the Contractor for security, maintenance, heat, utilities, and damage to the work and insurance.
   4. Fix the time limit within which the Contractor shall complete the items listed herein.

16.2 Partial Occupancy or Use: The Community College System of New Hampshire may take occupancy or use of completed or partially completed portions of the work upon written agreement between the Commissioner and the Contractor. Said partial occupancy or use shall have the approval of the insurer and Code enforcement authorities having jurisdiction. Said partial occupancy or use, (whether substantial completion has been obtained or not) provided the Contract Representative and Contractor have agreed upon written terms detailing each of the entities responsibilities in their entirety, may be exercised under these General Conditions.

A. A Written agreement shall stipulate the time period for completion of all Work and the commencement date for all applicable contract warranties. Said written agreement shall be preceded by a Contractor generated listing of all incomplete Work, meeting with the approval of the Contract Representative, before partial occupancy or use is taken by the Community College System of New Hampshire with prior approval of the Division.

16.3 If the Contractor fails to complete the items on the "punch list," by the date specified on the Substantial Completion Certificate, then in addition to the corrective measures listed in the Certificate of Substantial Completion, the Community College System of New Hampshire may use the monies still due the Contractor to have such items completed and the Contractor shall lose any claim to the monies so used. The Surety may be notified of any delay or failure to complete the work.

16.4 Upon written notice that the work is ready for final inspection and acceptance, the Contract Representative shall promptly make such inspection, to determine the work is acceptable under the Contract Documents and the Contract fully performed. The Contractor shall submit a request for payment, specifically identifying Final Payment. The Contractor shall provide all certificates and reports, as required, throughout the contract and shall coordinate their preparation and submission

prior to request for final payment. Failure to submit such certificates and reports shall be considered default of contract.

PART 17 DEFAULT AND TERMINATION OF CONTRACT

17.1 If the Contractor:

A. Fails to begin work under Contract within the time identified in specification section 01100.

B. Fails to perform the work with sufficient workers and equipment, or with sufficient materials to assume 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 the work, or

E. Fails to resume work, which has been discontinued, within a reasonable time after notice to do so, or

F. Becomes insolvent or has declared bankruptcy, or commits any act of bankruptcy or insolvency, or

G. Makes an assignment for the benefit of creditors, or

H. For any other causes whatsoever, fails to carry on the work in an acceptable manner.

17.2 The Commissioner will give notice, in writing, to the Contractor and his Surety for such delay, neglect, and default for any item identified above.

A. Upon receipt of Notification of Default and the Contractor or Surety does not proceed in accordance with said Notification, then the Commissioner will Terminate the Contract. Upon which, the Commissioner shall have full power and authority, without violating the Contract, to assume the prosecution of the work. The Commissioner may enter into one or more agreements for the completion of said Contract according to the terms and conditions thereof, or use such other methods as will be required for the completion of said Contract in an acceptable manner.

1. All extra costs and charges incurred by the Community College System of New Hampshire as a result of such delay, neglect or default, together with the cost of completing 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 that would have been payable under the Contract, then the Contractor and the Surety shall be liable and shall pay to the Community College System of New Hampshire, the amount of such excess.

PART 18 TERMINATION OF CONTRACT WITHOUT FAULT

18.1 Except in cases controlled by the preceding section, the Commissioner, for any cause, including, but not limited to an order of any Federal authority or petition of the Contractor due to circumstances beyond its control may, by written notice to the Contractor and the Surety, with the

concurrence of the Governor and Council, terminate the Contract or any portion thereof subject to the Condition(s) A, B, C, and D provided below.

18.2 Notwithstanding anything to the contrary contained in these conditions, it is understood and agreed by the parties hereto that all obligations of the Community College System of New Hampshire hereunder, including the continuance of payments, are contingent upon the availability and continued appropriation of State and/or Federal Funds, and in no event shall the Community College System of New Hampshire be liable for any payments hereunder in excess of such available or appropriated funds. In the event of a reduction, termination or failure to appropriate any or all such available funds or appropriations or a reduction of expenditures of Community College System of New Hampshire funds by the Advisory Budget Control Committee, the Commissioner may, by written notice to the Contractor and Surety, immediately terminate this Contract in whole or in part in accordance with the following conditions:

A. When a Contract, or portion thereof, is terminated before completion of all items of work in the Contract, payment will be made for the actual items of work completed. Payment of items of work not completed at time of termination shall be the greater of the following amounts:
   1. A percentage of the Contract unit price, which percentage shall be the percentage of completion of the particular item at time of termination.
   2. Such amount as shall be mutually agreed upon by the parties. No claim for loss of anticipated profits on items or units of work not completed will be allowed.

B. Reimbursement for organization of the work and mobilization, when not otherwise included in the Contract, shall be made where the volume of work completed is too small to compensate the Contractor for these expenses under the Contract; the intent being that an equitable settlement be made with the Contractor.

C. Acceptable materials, obtained or ordered by the Contractor for the work, and that are not incorporated in the work shall, at the option of the Contractor, be purchased from the Contractor based upon the delivered cost of the materials at such points of delivery as may be designated by the Contract Representative. The Contractor shall do everything possible to cancel unfilled orders.

D. Termination of a Contract, or a portion thereof, shall not relieve the Contractor of its responsibilities for the work completed nor shall it relieve the Surety of its obligations for and concerning any claims arising out of the work performed.

PART 19 ASSIGNMENT PROVISION

19.1 The Contractor hereby agrees that it will assign to the Community College System of New Hampshire, all causes of action that it may acquire under the anti-trust laws of New Hampshire and the United States as a result of conspiracies, combinations of contracts in restraint of trade which affect the price of goods or services obtained by the Community College System of New Hampshire under this Contract, if so requested by the Community College System of New Hampshire.

END OF SECTION

SECTION 01100

SUMMARY

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Contract description.

B. Work by College.

C. College supplied products.

D. Contractor's use of site.

E. Work sequence.

F. College occupancy.

G. Specification Conventions.

1.2 CONTRACT DESCRIPTION

A. Work of his project consists of a one-inch pavement overlay and parking lot striping of an existing parking lot that is approximately 85,000 square feet.

B. The Project will include but not be limited to the Disciplines of: asphalt pavement and paint striping.

C. Perform Work of Contract under stipulated lump sum grand total contract with the College in accordance with Conditions of Contract.

D. The Contractor shall, except as otherwise specifically stated in the Contract Documents, provide and pay for all materials, labor, tools, equipment, water, heat, fuel, light, power, transportation, superintendence, temporary construction of every nature, and all other services and facilities of every nature whatsoever necessary to execute, complete, and deliver the work within the specified time.

1.3 WORK BY COLLEGE

1. NONE

1.4 COLLEGE SUPPLIED PRODUCTS

1. NONE

1.5 CONTRACTOR'S USE OF SITE [AND PREMISES]

A. Limit use of site and premises to allow:
   1. College occupancy.
   2. Work by Others and Work by College.

B. Access to Site: Limited to Normal working hours.

C. Construction Operations: Limited to areas as designated in the plans and specifications.

D. Time Restrictions for Performing Work: Normal working hours of [7:30] am to [4:30] pm, Monday through Friday with the following restrictions:
   1. No access during the following observed holidays:
      a. New Year's Day.
      b. Martin Luther King Jr. Civil Rights Day.
      c. Washington's Birthday.
      d. Memorial Day.
      e. Independence Day.
      f. Labor Day.
      g. Veterans' Day.
      h. Thanksgiving Day.
      i. Day after Thanksgiving.
      j. Christmas Day.
   2. Access for work outside of normal working hours shall be requested in writing to the Contract Representative, at least one week in advance. The Contract Representative may accept or reject the request.

E. Utility Outages and Shutdown: Shall be coordinated with the building users to minimize disruption of services, and may require work to take place outside of normal working hours with request and approval.

1.6 WORK SEQUENCE

A. Work shall commence within 7, days after issuance of Notice to Proceed. Failure to comply shall constitute Default of Contract.

B. Construct Work to accommodate College's occupancy requirements during construction period, coordinate construction schedule and operations with CCSNH Contract Administrator:

1.7 COLLEGE OCCUPANCY

A. The College intends to occupy the campus during the Project. The Contractor's guarantee of work identified in Section 1700 shall not commence until the Contractor is granted a Certificate of Substantial Completion.

B. Cooperate with College to minimize conflict, and to facilitate College's operations.

C. Schedule the Work to accommodate College occupancy.

D. Partial Occupancy. The College will be permitted to partially occupy the premises as phases of the project are completed. Warranties for items contained within the areas subject to partial occupancy shall commence upon the College's use of those premises identified in the Partial Occupancy. Warranties on systems extending beyond the area subject to the Partial Occupancy shall not commence until all areas utilizing those system(s) are complete and fully functional.

1.9 SPECIFICATION CONVENTIONS

E. These specifications are written in imperative mood and streamlined form. This imperative language is directed to the Contractor, unless specifically noted otherwise. The words "shall be" are included by inference where a colon (:) is used within sentences or phrases.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01200

PRICE AND PAYMENT PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Allowances (intentionally omitted).

B. Testing and inspection allowances. (intentionally omitted)

C. Schedule of values.

D. Requisition for payment.

E. Change procedures.

F. Defect assessment.

G. Unit prices.

H. Alternates (intentionally omitted).

1.2 ALLOWANCES (intentionally omitted).

1.3 TESTING AND INSPECTION ALLOWANCES (intentionally omitted)

1.4 SCHEDULE OF VALUES

A. Submit printed schedule on AIA Form G703 - Continuation Sheet for G702. Contractor's standard form or electronic media printout will be considered.

B. Submit Schedule of Values in duplicate within 15 days after date of issuance of Notice to Proceed. Failure to submit within specified time period will constitute Default of Contract.

C. Format: Utilize Table of Contents of these Specifications. Identify each line item with number and title of major specification Section. Identify bonds and insurance, allowances, and alternates

D. Include a separate line item for the amount of each Allowance and Alternates specified in this section. For unit cost Allowances, identify quantities taken from Contract Documents multiplied by unit cost to achieve total for each item.

E. Revise schedule to list approved Change Orders, with each Requisitions For Payment.

1.5 REQUISITION FOR PAYMENT

A. Submit one copy of each application.

B. Content and Format: Items on the Requisition for Payment shall be consistent with the items on the Proposal Form. Utilize the Schedule of Values as documentation for payment items.

C. Submit updated construction schedule with each Requisition for Payment.

D. Payment Period: Submit at intervals stipulated in Document 00708 General Conditions. CCSNH

E. Substantiating Data: When the Contract Representative requires substantiating information, submit data justifying dollar amounts in question.

F. Include the following with Requisition for Payment, payment will not be processed if any items are missing or incomplete:

1. Record documents as specified in Section 01700, for review by the Contract Representative, which will be returned to Contractor.
2. Affidavits attesting to off-site stored products.
3. Construction progress schedules, revised and current as specified in Section 01330.

1.6 CHANGE PROCEDURES

A. Submittals: Submit name of individual authorized to receive change documents, and be responsible for informing others in Contractor's employ or Subcontractors of changes to the Work.

B. The Contract Representative will advise of minor changes in the Work not involving adjustment to Contract Sum/Price or Contract Time, or that may be necessary to carry out the work included in the Contract, by issuing supplemental instructions.

C. The Contract Representative may issue a Proposal Request including a detailed description of proposed change(s) with supplementary or revised Drawings and specifications, a change in Contract Time for executing the change. The Contractor will prepare and submit estimate within ten days.

D. Contractor may propose changes by submitting a request for change(s) to the Contract Representative , describing proposed change and its full effect on the Work. Each request shall be a separate item and sequentially numbered. Include a statement describing reason for the change, and effect on Contract Sum/Price and Contract Time with full documentation and a statement describing effect on Work by separate or other Contractors.

E. Stipulated Sum/Price Change Order: Based on Proposal Request and Contractor's fixed price quotation or Contractor's request for Change Order as approved by the Contract

Representative. Submit the breakdown of the following items on a Stipulated Sum/Price Change Order Form for review and approval by the Contract Representative:

1. The Contractor shall include the following indirect costs for work performed by the General Contractor as part the Contractors' price:
   a. Worker's Compensation and Employee Liability.
   b. Unemployment and Social Security Taxes.
2. In addition to the above indirect costs the General Contractor shall be allowed the following markups:
   a. Ten percent (10%). Said ten percent (10%) shall be all inclusive for overhead, supervision, and profit for Work performed by the General Contractor
   b. Five percent (5%) on that part of work performed by Subcontractors.
   c. The same percentages above shall apply to Subcontractors.
3. On any change that involves a net credit to the State, no allowance for overhead, supervision and profit shall be figured.
4. Extension of Contract Time: State any requests for extension of Contract Time with justification for such a request.

F. Unit Price Change Order: For contract unit prices and quantities, the Change Order will be executed on fixed unit price basis. For unit costs or quantities of units of work which are not pre-determined, execute Work under Construction Change Directive. Changes in Contract Sum/Price or Contract Time will be computed as specified for Time and Material Change Order.

G. Construction Change Directive : The Contract Representative may issue directive, signed by the Bureau Administrator or Assistant Administrator, instructing the Contractor to proceed with change in the Work, for subsequent inclusion in a Time and Material Change Order. Document will describe changes in the Work, and designate method of determining any change in Contract Sum/Price or Contract Time. Promptly execute change. Failure to comply will result in Default of Contract.

H. Time and Material Change Order: Submit itemized account and supporting data within 10 days of completion of change. The Contract Representative will determine change allowable in Contract Sum/Price and Contract Time as provided in Contract Documents.

1. Maintain detailed records of work done on Time and Material basis. Provide full information required for evaluation of proposed changes, and to substantiate costs for changes in the Work.
2. Document each quotation for change in cost or time with sufficient data to allow evaluation of quotation. If acceptable, a Change Order for a Not to Exceed Amount will be prepared.
3. The Contractor as payment in full, including superintendence and overhead, shall accept the compensation herein provided and profit, for extra work performed. For all such work, the Contractor shall furnish certified copies of the payrolls on forms provided for that purpose, invoices of all materials, and such other information as may be required by the Contract Representative. Submit the breakdown of items on a Bureau Time and Material Change Order Form for review and approval by the Contract Representative:
   a. Labor (Actual wage + 40%): The Construction Superintendent is responsible for logging the time for each individual. For all laborers and

foremen engaged on the specific operation and entered directly on the Contractor's payroll, the Contractor will receive the actual rate of wage for each and every hour said laborers and Foremen are actually engaged in such work to which will be added an amount equal to forty percent (40%) of the sum thereof, which percentage shall include the cost percentages of the following items as applied to the labor cost involved:

1) Contract Bond Premium.
2) Public Liability Insurance.
3) Worker's Compensation Insurance.
4) Federal Social Security.
5) Unemployment Compensation Taxes

b. Materials (Actual Cost + 10%): For all materials entering permanently into the work plus freight charges thereon, and for all labor not entered directly on his payroll, the Contractor will receive the actual cost, as shown by original receipted bills forwarded to the Contract Representative, to which cost will be added an amount equal to ten percent (10%) of the sum thereof. Bills presented by the Contractor for material taken back from his stock will be subject to the ten percent (10%) allowance if approved by the Contract Representative.

c. Equipment (Reasonable Rental Charge + 0%): For any trucks, machinery or special equipment, other than small tools, the Contractor will receive a reasonable rental charge to which sum no percentage will be added. This rental charge shall be agreed upon in writing before the work is begun and shall include an operator and all fuel, lubricants, and the upkeep of the equipment.

4. In addition to the above costs the General Contractor shall be allowed the following markups:
   a. Ten percent (10%). Said ten percent (10%) shall be all inclusive for overhead, supervision, and profit for Work performed by the General Contractor
   b. Five percent (5%) on that part of work performed by Subcontractors.
   c. The same percentages above shall apply to Subcontractors.
5. Extension of Contract Time: State any requests for extension of Contract Time with justification for such a request.

I. Any Changes that result in a credit to any portion of the contract and/or a change in the Contract Time must be processed as an Change Order except as provided for in Item 1.2E.

J. Execution of Change Orders: CCSNH Contract Representative will issue Change Orders per the following procedures.
1. The Contract Representative reviews cost for Change in Work. If needed the Contract Representative will request additional items, back-up information, and request any possible changes or clarifications.
2. Contract Representative will prepare a Change Order.
3. Contract Representative will issue the Change Order to the Contractor for review and signature.
4. Contractor submits signed Change Order to the Contract Representative.

5. The Contract Representative completes the Change Order with the signature of the College Representative
6. A fully signed and executed Change Order is issued to Contract Representative, Clerk of the Works, and Contractor.

K. Execution of Change Orders: The Contractor is responsible for preparing and updating a spreadsheet log itemizing all Proposed Changes. A separate spreadsheet shall be completed for each Allowance Item. The spreadsheet shall include columns for Proposed Change Number, Description, Amount of Change, (or initial order of magnitude), Status, and Approved Amounts. In addition a current balance remaining shall be included. Change Orders will be processed per the following procedures:
1. The Contract Representative reviews cost for Change in Work with the College and Consultant(s). If needed the Contract Representative will request additional items, back-up information, and request any possible changes or clarifications.
2. Contract Representative and College Representative signs Change Order.
3. Contractor can proceed with Change Order Work with direction from the Contract Representative.
4. Fully signed and executed Change Order is issued to the Contract Representative, Clerk of the Works, and Contractor.

L. Correlation Of Contractor Submittals:
1. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as separate line item and adjust Contract Sum/Price.
2. Promptly revise progress schedules to reflect change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
3. Promptly enter changes in Project Record Documents.

1.7 DEFECT ASSESSMENT

A. Replace the Work, or portions of the Work, not conforming to specified requirements.

B. If, in the opinion of the Contract Representative, it is not practical to remove and replace the Work, the Contract Representative will direct appropriate remedy or adjust payment.

C. The defective Work may remain, but unit sum/price will be adjusted to new sum/price at discretion of the Contract Representative.

D. Defective Work will be repaired to instructions of and acceptance by the Contract Representative, and unit sum/price will be adjusted to new sum/price at discretion of the Contract Representative.

E. Authority of the Contract Representative to assess defects and identify payment adjustments, is final.

F. Non-Payment For Rejected Products: Payment will not be made for rejected products for any of the following:
1. Products wasted or disposed of in a manner that is not acceptable.
2. Products determined as unacceptable before or after placement.

3. Products not completely unloaded from transporting vehicle.
4. Products placed beyond lines and levels of required Work.
5. Products remaining on hand after completion of the Work.
6. Loading, hauling, and disposing of rejected products.

1.8 UNIT PRICES

A. NONE

1.9 ALTERNATES (intentionally omitted)

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01300

ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Coordination and project conditions.

B. Permits and fees.

C. Field engineering.

D. Preconstruction meeting.

E. Site mobilization meeting.

F. Progress meetings.

G. Pre-installation meetings.

H. Cutting and patching.

I. Notification of Subcontractors and Workmen's Compensation Insurance (SB 78)

J. Special procedures.

1.2 COORDINATION AND PROJECT CONDITIONS

A. Coordinate scheduling, submittals, and Work of various sections of the Specifications to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.

B. The Contractor shall comply with the "Underground Utility Damage Prevention System" by notification to DIG-SAFE SYSTEM of intent to excavate near or around any underground utility installations in public ways. The Contractor shall call 1-800/225-4977 at least seventy-two (72) hours in advance of starting any excavation. Saturday, Sundays, and legal holidays are not included in the computation of the required seventy-two (72) hour notice.

C. Prior to any Work, the Contractor shall hire an independent company to locate utilities potentially affected by the Work and as shown and/or identified in the Contract Documents. All utilities shall be identified by the Contractor on the Record Drawings.

D. Verify utility requirements and characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, operating equipment.

E. Coordinate space requirements, supports, and installation of mechanical and electrical Work indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.

F. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within construction. Coordinate locations of fixtures and outlets with finish elements.

G. Coordinate completion and clean-up of Work of separate sections in preparation for Substantial Completion [and for portions of Work designated for State's [partial] occupancy].

H. After State occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of State's activities.

1.3 PERMITS AND FEES

A. The CCSNH shall obtain and pay for all permits, and impact fees as may be required by law for construction of CCSNH’s facility. The Contractor shall pay for all fees and charges, and use of the property other than the site of the work for storage of materials or other purposes.

B. The Contractor shall pay all applicable Federal, State, and Local sales and other taxes, except taxes and assessments on the real property comprising the site of the Project.

1.4 FIELD ENGINEERING (not used)

1.5 PRECONSTRUCTION MEETING

A. The Contract Representative will schedule meeting at the Project site prior to Contractor occupancy.

B. Attendance required (unless otherwise waived): Contract Representative, Clerk of the Works, Contractor, Contractor's Superintendent, and major Subcontractors.

C. Potential Agenda Topics:
1. Distribution of Contract Documents.
2. Submission of list of Subcontractors, insurance carriers, subcontracting relationship, list of products, schedule of values, and progress schedule.
3. Designation of personnel representing parties in Contract.
4. Use of premises by CCSNH and Contractor.
5. College’s requirements and partial occupancy.
6. Construction facilities and controls provided by CCSNH.
7. Temporary utilities provided by CCSNH
8. Security and housekeeping procedures.
9. Schedules.
10. Application for payment procedures.
11. Procedures for maintaining record documents.

12. Requirements for start-up of equipment.
13. Inspection and acceptance of equipment put into service during construction period.

D. Contract Representative shall record minutes and distribute copies within two days after meeting to participants, with one copy to each person in attendance and one to those affected by decisions made.

1.6 PROGRESS MEETINGS

A. Schedule and administer meetings throughout progress of the Work at weekly intervals.

B. Attendance required (unless otherwise waived): Contract Representative, Clerk of the Works, Contractor, Contractor's Superintendent, and major Subcontractors.

C. Potential Agenda Topics:
1. Review minutes of previous meetings.
2. Review of Work progress.
3. Field observations, problems, and decisions.
4. Identification of problems impeding planned progress.
5. Review of submittals schedule and status of submittals.
6. Review of off-site fabrication and delivery schedules.
7. Maintenance of progress schedule.
8. Corrective measures to regain projected schedules.
9. Planned progress during succeeding work period.
10. Coordination of projected progress.
11. Maintenance of quality and work standards.
12. Effect of proposed changes on progress schedule and coordination.
13. Other business relating to Work.

D. Contract Representative shall record minutes and distribute copies within two days after meeting to participants, with one copy to each person in attendance and one to those affected by decisions made.

1.7 PRE-INSTALLATION MEETING(S)

A. When required in individual specification sections, convene pre-installation meetings at Project site prior to commencing work of specific section.

B. Require attendance of parties directly affecting, or affected by, Work of specific section.

C. Notify the Contract Representative seven days in advance of meeting date.

D. Contractor shall prepare agenda and preside at meeting:
1. Review conditions of installation, preparation and installation procedures.
2. Review coordination with related work.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 CUTTING AND PATCHING

A. Employ skilled and experienced installer to perform cutting and patching.

B. Submit written request in advance of cutting or altering elements affecting:
1. Structural integrity of element.
2. Integrity of weather-exposed or moisture-resistant elements.
3. Efficiency, maintenance, or safety of element.
4. Visual qualities of sight exposed elements.
5. Work of CCSNH or separate contractor.

C. Execute cutting, fitting, and patching [including excavation and fill,] to complete Work, and to:
1. Fit the several parts together, to integrate with other Work.
2. Uncover Work to install or correct ill-timed Work.
3. Remove and replace defective and non-conforming Work.
4. Remove samples of installed Work for testing.
5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.

D. Execute work by methods to avoid damage to other Work, and to provide proper surfaces to receive patching and finishing.

E. Cut masonry and concrete materials using masonry saw or core drill.

F. Restore Work with new products in accordance with requirements of Contract Documents.

G. Fit Work tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.

H. Maintain integrity of wall, ceiling, roof, or floor construction; completely seal voids.

I. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with material in accordance with design and code requirements, to full thickness of penetrated element.

J. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for assembly, refinish entire unit.

K. Identify hazardous substances or conditions exposed during the Work to the Contract Representative for decision or remedy.

3.2 SPECIAL PROCEDURES

A. Materials: As specified in product sections; match existing with new products [and salvaged products] for patching and extending work.

B. Employ skilled and experienced installer to perform alteration work.

C. Cut, move, or remove items as necessary for access to alterations and renovation Work. Replace and restore at completion.

D. Remove unsuitable material not marked for salvage, including rotted wood, corroded metals, and deteriorated masonry and concrete. Replace materials as specified for finished Work.

E. Remove debris and abandoned items from area and from concealed spaces.

F. Prepare surface and remove surface finishes to permit installation of new work and finishes.

G. Close openings in exterior surfaces to protect existing work from weather and extremes of temperature and humidity.

H. Remove, cut, and patch Work in manner to minimize damage and to permit restoring products and finishes to original condition.

I. Refinish existing visible surfaces to remain in renovated rooms and spaces, to original condition for each material, with neat transition to adjacent finishes.

J. Where new Work abuts or aligns with existing, provide smooth and even transition. Patch Work to match existing adjacent Work in texture and appearance.

K. When finished surfaces are cut so that smooth transition with new Work is not possible, terminate existing surface along straight line at natural line of division and submit recommendation to Contract Representative for review.

L. Where change of plane of 1/inch or more occurs, submit recommendation for providing smooth transition to Contract Representative for review.

M. Trim existing doors to clear new floor finish. Refinish trim to original condition.

N. Patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections.

O. Finish surfaces as specified in individual product sections.

END OF SECTION

SECTION 01330

SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Submittal procedures.

B. Construction progress schedules.

C. Subcontractor list.

D. Proposed products list.

E. Product data.

F. Shop drawings.

G. Samples.

H. Design data.

I. Test reports.

J. Certificates.

K. Manufacturer's instructions.

L. Manufacturer's field reports.

M. Erection drawings.

N. Construction photographs.

1.2 SUBMITTAL PROCEDURES

A. Transmit each submittal with CCSNH accepted form.

B. Sequentially number transmittal forms. Mark revised submittals with original number and sequential alphabetic suffix.

C. Identify Project, Contractor, subcontractor and supplier; pertinent drawing and detail number, and specification section number, appropriate to submittal.

D. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with requirements of the Work and Contract Documents. Incomplete items or items submitted without the Contractor's signed stamp of approval thereon will be returned rejected.

E. Schedule submittals to expedite Project. Coordinate submission of related items. Deliver to:

Contract Representative
Matthew Moore
memoore@ccsnh.edu
Director of Capital Projects & Planning
Community College System of New Hampshire
26 College Drive
Concord, NH 03301

F. For each submittal for review, allow 14 days excluding delivery time to and from Contract Representative.

1. All shop drawings to be returned to Contractor from the Contract Representative. Direct return of shop drawings from Architect or Engineer to Contractor is not permitted.

G. Identify variations from Contract Documents and product or system limitations that may be detrimental to successful performance of completed Work.

H. Allow space on submittals for Contractor and Architect or Engineer review stamps.

I. When revised for resubmission, identify changes made since previous submission.

J. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report inability to comply with requirements.

K. Submittals not requested will not be recognized or processed.

L. Work shall not begin until [All] submittal items have been approved and returned to General Contractor by the Contract Representative.

1.3 CONSTRUCTION PROGRESS SCHEDULES

A. Submit initial schedules at PreConstruction Meeting.

B. Submit revised Progress Schedules with each Application for Payment.

C. Distribute copies of reviewed schedules to Project site file, subcontractors, suppliers, and other concerned parties.

D. Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in schedules.

E. Submit horizontal bar chart with separate line for each major portion of Work or operation\ and section of Work, identifying first work day of each week.

F. Show complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Indicate early and late start, early and late finish, float dates, and duration.

G. Indicate estimated percentage of completion for each item of Work at each submission.

H. Submit separate schedule of submittal dates for shop drawings, product data, and samples, including CCSNH furnished products and dates reviewed submittals will be required from Contract Representative. Indicate decision dates for selection of finishes. Selection of finishes cannot occur until ALL finish items are submitted and products are approved.

I. Indicate delivery dates for furnished products.

J. Revisions To Schedules:
1. Indicate progress of each activity to date of submittal, and projected completion date of each activity.
2. Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.
3. Prepare narrative report to define problem areas, anticipated delays, and impact on Schedule. Report corrective action taken, or proposed, and its effect including effect of changes on schedules of separate contractors.

1.4 SUBCONTRACTOR LIST

A. Submit list, at the PreConstruction Meeting, of subcontractors setting forth in detail the work for which they will be responsible. In addition, the General Contractor shall identify what work will be performed with the Bidder's own forces.

B. Provide Subcontractor and Insurance information as required under SB 78.
1. Subcontractor list is to include subcontracting relationship and the carrier of Workmen Compensation Insurance for all subcontractors, all tiers.
2. Proof of Insurance is to be provided within 36 hours of request.
3. Changes and additional to Subcontractor and Insurance is to be provided to the CCSNH within 36 hours of occurrence.
4. The CCSNH will post this information in a publicly accessible website for the duration of the contract.

1.5 PRODUCT DATA

A. Product Data: Submit for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.

B. Submit electronic copies to the Contract Representative. The copy for the CCSNH is separate from the copy the Contractor to provide as part of close out procedures.

C. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.

D. Indicate product utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

E. After review, produce copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents described in Section 01700.

1.6 SHOP DRAWINGS

A. Shop Drawings: Submit for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.

B. Indicate special utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.

C. Submit an electronic copy to the Contract Representative. The copy for the CCSNH is separate from the copy the Contractor to provide as part of close out procedures.

D. After review, produce copies and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents described in Section 01700.

1.7 SAMPLES

A. Samples: Submit for review for limited purpose of checking for conformance with information given and design concept expressed in Contract Documents.

B. Samples For Selection as Specified in Product Sections:
   1. Submit to Contract Representative for aesthetic, color, or finish selection.
   2. Submit samples of finishes from full range of manufacturers' standard colors, in custom colors selected, textures, and patterns for Contract Representative and System approval.

C. Submit samples to illustrate functional and aesthetic characteristics of Products, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.

D. Include identification on each sample, with full Project information.

E. Submit number of samples specified in individual specification sections; Contract Representative will retain one sample and Architect or Engineer will retain one sample.

F. Reviewed samples which may be used in the Work are indicated in individual specification sections.

G. Samples will not be used for testing purposes unless specifically stated in specification section.

H. After review, produce duplicates and distribute in accordance with SUBMITTAL PROCEDURES article and for record documents purposes described in Section 01700.

1.8 DESIGN DATA

A. Submit for Contract Representative's knowledge.

B. Submit for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.

1.9 TEST REPORTS

A. Submit for Contract Representative's knowledge.

B. Submit test reports for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.

1.10 CERTIFICATES

A. When specified in individual specification sections, submit certification by manufacturer, installation/application subcontractor, or Contractor, to Contract Representative in quantities specified for Product Data.

B. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.

C. Certificates may be recent or previous test results on material or Product, but must be acceptable to the Contract Representative.

1.11 MANUFACTURER'S INSTRUCTIONS

A. When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, [start-up,] adjusting, and finishing, to the Contract Representative in quantities specified for Product Data.

B. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

1.12 MANUFACTURER'S FIELD REPORTS

A. Submit reports for Contract Representative's and System's benefit.

B. Submit report in duplicate within 7 days of observation to the Contract Representative for information.

C. Submit for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.

1.13 ERECTION DRAWINGS

A. Submit to the Architect and Contract Representative for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.

B. Data indicating inappropriate or unacceptable Work may be subject to action by the Architect, Engineer, or Contract Representative.

1.14 CONSTRUCTION PHOTOGRAPHS

A. Provide photographs of construction throughout progress of Work produced by an experienced] photographer, acceptable to the Contract Representative.

B. Twice monthly submit photographs.

C. Photographs: Submit digital images on 3-1/2” diskettes or on compact discs.

D. Take multiple site photographs from differing directions and interior photographs indicating relative progress of the Work, three (3) days maximum prior to submitting.

E. Identify each image. Identify name of Project, contract number phase orientation of view, date and time of view.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01600

PRODUCT REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Products.

B. Product delivery requirements.

C. Product storage and handling requirements.

D. Product options.

E. Product substitution procedures.

F. Equipment electrical characteristics and components.

1.2 PRODUCTS

A. Furnish products of qualified manufacturers suitable for intended use. Furnish products of each type by single manufacturer unless specified otherwise.

B. All materials and equipment shall be new, except as specifically permitted by Contract Documents.

C. Furnish interchangeable components from same manufacturer for components being replaced.

D. The use of asbestos containing materials shall be prohibited.

1.3 PRODUCT DELIVERY REQUIREMENTS

A. Transport and handle products in accordance with manufacturer's instructions.

B. Promptly inspect shipments to ensure products comply with requirements, quantities are correct, and products are undamaged.

C. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

1.4 PRODUCT STORAGE AND HANDLING REQUIREMENTS

A. Store and protect products in accordance with manufacturers' instructions.

B. Store with seals and labels intact and legible.

C. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.

D. For exterior storage of fabricated products, place on sloped supports above ground.

E. Provide bonded off-site storage and protection when site does not permit on-site storage or protection only with prior approval from the Contract Representative.

F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.

G. Store loose granular materials on solid flat surfaces in well-drained area. Prevent mixing with foreign matter.

H. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.

I. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

1.5 PRODUCT OPTIONS

A. Products Specified by Reference Standards or by Description Only: Any product meeting those standards or description.

B. Products Specified by Naming One or More Manufacturers with or without provision for substitutions: Products of one of manufacturers named and meeting specifications, no options or substitutions allowed. Submit request for substitution for any manufacturer not named in accordance with the following article.

1.6 PRODUCT SUBSTITUTION PROCEDURES

A. Where Bidding Documents stipulate particular Products, substitution requests will ONLY be considered before receipt of Bids. Submit requests per the requirements specified in this section.
   1. All requests shall be submitted to the Contract Representative not later than five (5) business days before the hour and day set for bid opening. Incomplete requests or requests received after this deadline will not be considered.
   2. All requests that are approved and are acceptable to the Department will be issued as part of an Addendum to each Bidder who has received a set of bidding documents, so that all Bidders may avail themselves of the change in submitting their Proposals.

B. Substitutions [may] be considered after bid opening when a product becomes unavailable through no fault of the Contractor. The Contractor shall apply to the Contract Representative, in writing, within ten (10) days of his realizing his inability to furnish the article specified, describing completely the substitution he desires to make. The Contractor shall include a dated written statement from the manufacturer outlining an explanation for the unavailability of the product. Substitutions for reasons of lead times, i.e., the time between when the Contractor orders necessary materials from the vendor

and anticipated delivery, will only be reviewed if the lead time is more than the length of the contract time. The Department may extend the contract time to accommodate the product specified. No additional costs from the Contractor will be considered due to the fact that the Contractor shall verify lead times and coordinate with contract time during the bidding phase.

C. Document each request with complete data substantiating compliance of proposed Substitution with Contract Documents.

D. A request constitutes a representation that Bidder:
1. Has investigated proposed product and determined that it meets or exceeds quality level of specified product.
2. Will provide same warranty for Substitution as for specified product.
3. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to the State.
4. Waives claims for additional costs or time extension which may subsequently become apparent.
5. Will reimburse Department and Architect and/or Engineer for review or redesign services associated with re-approval by authorities having jurisdiction.

E. Substitutions will not be considered when they are indicated or implied on Shop Drawing or Product Data submittals, without separate written request, or when acceptance will require revision to Contract Documents.

F. Substitution Submittal Procedure:
1. Submit three copies of request for Substitution for consideration. Limit each request to one proposed Substitution.
2. Submit Shop Drawings, Product Data, and certified test results attesting to proposed product equivalence. Burden of proof is on proposer.
3. The Department will notify Bidders in writing of decision to accept by issuing an addendum.

PART 2 PRODUCTS

A. Not used

PART 3 EXECUTION

Not Used.

END OF SECTION

SECTION 01700

EXECUTION REQUIREMENTS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Closeout procedures.

B. Final cleaning.

C. Protecting installed construction.

D. Project record documents.

E. Manual for materials and finishes.

F. Product warranties and product bonds.

G. Guarantee of work.

1.2 CLOSEOUT PROCEDURES

A. Submit a signed Substantial Completion Application attesting that the Contract Documents have been reviewed, Work has been inspected, and that all Work is complete in accordance with Contract Documents and ready for Contract Representative review. The Substantial Completion Application for use by the Contractor is attached to the end of this specification section. The Contract Representative may modify this Agreement to accommodate any changes in Work.
   1. Provide submittals to the Contract Representative as required by the Contract Documents and as required by authorities having jurisdiction.

B. Only after completion of all Punch List items and submission of all items the Contractor shall submit a Final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.

C. College will occupy portions of building as specified in Section 01100.

1.3 FINAL CLEANING

A. Execute final cleaning prior to final project assessment.

B. Clean debris from roofs, gutters, downspouts, and drainage systems.

C. Clean site; sweep paved areas, rake clean landscaped surfaces.

D. Remove waste and surplus materials, rubbish, and construction facilities from site.

1.4 PROTECTING INSTALLED CONSTRUCTION

A. Protect installed Work and provide special protection where specified in individual specification sections.

B. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.

C. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.

D. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.

E. Prohibit traffic or storage upon waterproofed or roofed surfaces. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.

F. Prohibit traffic from landscaped areas.

1.5 PROJECT RECORD DOCUMENTS

A. Maintain on site one set of the following record documents; record actual revisions to the Work:
1. Drawings.
2. Specifications.
3. Addenda.
4. Change Orders and other modifications to the Contract.
5. Reviewed Shop Drawings, Product Data, and Samples.
6. Manufacturer's instruction for assembly, installation, and adjusting.

B. Ensure entries are complete and accurate, enabling future reference by State.

C. Store record documents separate from documents used for construction.

D. Record information concurrent with construction progress, not less than weekly.

E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
1. Manufacturer's name and product model and number.
2. Product substitutions or alternates utilized.
3. Changes made by Addenda and modifications.

F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
1. Measured depths of foundations in relation to finish [first] [main] floor datum.
2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
4. Field changes of dimension and detail.

5. Details not on original Contract drawings.

G. Submit documents to the Contract Representative at time of Substantial Completion.

1.6 MANUAL FOR MATERIALS AND FINISHES

A. Submit two copies of preliminary draft or proposed formats and outlines of contents before start of Work. The Contract Representative will review draft and return one copy with comments.

B. For equipment, or component parts of equipment put into service during construction and operated by State, submit documents within ten days after acceptance.

C. Submit one copy of completed volumes (15) fifteen days prior to Substantial Completion. Draft copy be reviewed and returned after Substantial Completion, with Architect/Engineer comments. Revise content of document sets as required prior to final submission.

D. Submit one set of revised final volumes in final form prior to final inspection, and one electronic version.

E. Building Products, Applied Materials, and Finishes: Include product data, with catalog number, size, composition, and color and texture designations. Include information for re-ordering custom manufactured products.

F. Instructions for Care and Maintenance: Include manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.

G. Moisture Protection and Weather Exposed Products: Include product data listing applicable reference standards, chemical composition, and details of installation. Include recommendations for inspections, maintenance, and repair.

H. Additional Requirements: As specified in individual product specification sections.

I. Include listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

1.7 PRODUCT WARRANTIES AND PRODUCT BONDS

A. Obtain warranties and bonds executed in duplicate by responsible subcontractors, suppliers, and manufacturers, within ten days after Substantial Completion. All warranties start dates shall be the Substantial Completion Date, if project is phased all warranties to start at the date of Substantial Completion of each phase.

B. Execute and assemble transferable warranty documents and bonds from subcontractors, suppliers, and manufacturers.

C. Verify documents are in proper form, contain full information, and are notarized.

D. Co-execute submittals when required.

E. Include Table of Contents and assemble in three D side ring binder with durable plastic cover.

F. Submit prior to final Application for Payment.

G. Time Of Submittals:
1. For equipment or component parts of equipment put into service during construction with State's permission, submit documents within (10) ten days after acceptance.
2. Make other submittals within (10) ten days after Date of Substantial Completion, prior to final Application for Payment.
3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within (10) ten days after acceptance, listing date of acceptance as beginning of warranty or bond period.

1.8 GUARANTEE OF WORK

A. Except as otherwise specified, all work shall be guaranteed by the Contractor against defects resulting form the use of inferior materials, equipment or workmanship for one (1) year 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 Contract Representative, 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 shall, promptly upon receipt of notice from the Commissioner, and at his own expense:
1. Place in satisfactory condition in every particular, all such guaranteed work, correct all defects therein.
2. Make good all damage to the building or site, or equipment or contents thereof, which in the opinion of the Contract Representative, 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.
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 may 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 Contract Representative and guarantee such resorted 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/her 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 term of this paragraph during the first year of the life of such special guarantee.

F. Failure to adhere to guarantee terms may result in suspension or barring from the prequalification list, or, alternatively, the requirement of a Letter of Credit or other guaranty equal to a percentage of the Contract amount.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION

Project #RVC 19-02

EXHIBIT "A"

FOR

Parking Lot Re-Paving

AT

RIVER VALLEY COMMUNITY COLLEGE

A COMPONENT OF THE

Community College System of New Hampshire

26 College Drive, Concord, NH

PROJECT MANUAL

Attached to this exhibit:

- Boring Logs
- Project Drawings and Specifications

BORING LOG

Nobis
Engineering a Sustainable Future
18 Chennel Drive, Concord, NH 03301

PROJECT
RIVER VALLEY CC

Claremont, New Hampshire

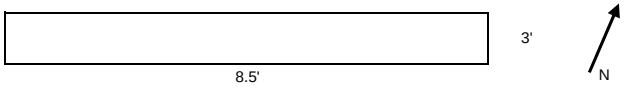
TEST PIT NO. B-1
SHEET 1 of 1
FILE NO. 86880
DATE 7/2/14

Engineer	Andy Robichaud	Rig Type:	Truck Mounted	Ground El.	
Contractor	N.E. Boring	Model:	B59	Datum	
Operator	Ken Smith	Hammer Type:	140 lb	Time Start	8:00
Weather		Hammer Hoist:	Winch	Time End	8:20

PID (ppm)	Depth Below Grade (ft)	Type & No.	Rec. (in.)	Depth (ft.)	Blows/ 6 in.	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Remarks
	1	S-1	16	0-2	6 8	Gravel Silt	S-1 Gravel (0-10) Sandy Silt (10-16)			
	2				3 4					
	3	S-2	22	2-4	6 10	Gravel GW	S-2 Sandy Silt (0-11) wet Fine Gravel (11-22)			
	4				15 26					
	5	S-3	15	4-6	22 25		S-3 Fine Gravel (0-15) wet			
	6				19 18		Bottom of Excavation			
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

REMARKS:

ST PIT PLAN



BOULDER	CLASS
12" - 24"	A
24" - 36"	B
>36"	C

OPORTIONS US

EXCAVATION EFFORT	
0-10%	Trace (Tr. E = Easy
10-20%	Little (Li.) M = Moderate
20-35%	Some (So. D = Difficult
35-50%	And

BORING LOG

Nobis
Engineering a Sustainable Future
18 Chennel Drive, Concord, NH 03301

PROJECT
RIVER VALLEY CC

Claremont, New Hampshire

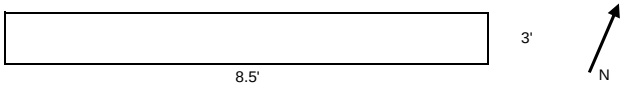
TEST PIT NO. B-2
SHEET 1 of 1
FILE NO. 86880
DATE 7/2/14

Engineer	Andy Robichaud	Rig Type:	Truck Mounted	Ground El.	
Contractor	N.E. Boring	Model:	B59	Datum	
Operator	Ken Smith	Hammer Type:	140 lb	Time Start	8:30
Weather		Hammer Hoist:	Winch	Time End	9:00

PID (ppm)	Depth Below Grade (ft)	Type & No.	Rec. (in.)	Depth (ft.)	Blows/ 6 in.	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Remarks
	1	S-1	15	0-2	7 9	Gravel	S-1 Gravel (0-15)			
	2				12 15					
	3	S-2	6	2-4	10 10	GW	S-2 Fine Gravel (0-6) wet Rock Fragments in spoon tip			Screen 0'-6'
	4				7 45					
	5	S-3	12	4-6	23 23		S-3 Fine Gravel (0-12) wet			
	6				33 32		Bottom of Excavation			
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

REMARKS:
Groundwater Observations: Depth Below Ground: 3.74' (TPVC), 6' to bottom of hole, Stabilization Time: 4 hrs. Notes:
Temporary well installed to 6', fully screened (2" PVC). PVC 1.4' above ground surface. PVC removed prior to leaving site.

ST PIT PLAN



BOULDER	CLASS
12" - 24"	A
24" - 36"	B
>36"	C

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10-20%	Little (Li.) M = Moderate
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35-50%	And

EXCAVATION EFFORT

BORING LOG

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Engineering a Sustainable Future
18 Chennel Drive, Concord, NH 03301

PROJECT
RIVER VALLEY CC

Claremont, New Hampshire

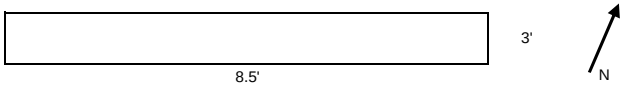
TEST PIT NO.	B-3
SHEET	1 of 1
FILE NO.	86880
DATE	7/2/14

Engineer	Andy Robichaud	Rig Type:	Truck Mounted	Ground El.	
Contractor	N.E. Boring	Model:	B59	Datum	
Operator	Ken Smith	Hammer Type:	140 lb	Time Start	9:05
Weather		Hammer Hoist:	Winch	Time End	9:20

PID (ppm)	Depth Below Grade (ft)	Type & No.	Rec. (in.)	Depth (ft.)	Blows/ 6 in.	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Remarks
		S-1	13	0-2	8		S-1 Organic Top Soil (0-2)			
	1				10	Gravel	Gravel (2-13)			
					12					
	2				10					
		S-2	15	2-4	12		S-2 Gravel (0-9) wet			
	3				8	Silt	Fine Sand, Trace Silt (9-15)			
					8	GW				
	4				8					
		S-3	17	4-6	19	Gravel	S-3 Fine to Coarse Gravel (0-17)			
	5				30					
					21					
	6				21		Bottom of Excavation			
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

REMARKS:

ST PIT PLAN



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EXCAVATION EFFORT

BORING LOG

Nobis
Engineering a Sustainable Future
18 Chennel Drive, Concord, NH 03301

PROJECT
RIVER VALLEY CC

Claremont, New Hampshire

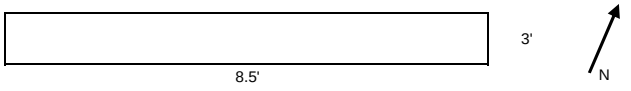
TEST PIT NO. B-4
SHEET 1 of 1
FILE NO. 86880
DATE 7/2/14

Engineer	Andy Robichaud	Rig Type:	Truck Mounted	Ground El.	
Contractor	N.E. Boring	Model:	B59	Datum	
Operator	Ken Smith	Hammer Type:	140 lb	Time Start	9:30
Weather		Hammer Hoist:	Winch	Time End	9:50

PID (ppm)	Depth Below Grade (ft)	Type & No.	Rec. (in.)	Depth (ft.)	Blows/ 6 in.	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Remarks
	1	S-1	16	0-2	5 6	Gravel	S-1 Organic Topsoil (0-3) Gravel (3-16)			
	2				9 6					
	3	S-2	12	2-4	7 7	GW	S-2 Fine Gravel (0-6) wet Coarse Gravel (6-12)			
	4				9 10					
	5	S-3	17	4-6	11 17		S-3 Coarse Gravel (0-7) Fine Gravel (7-17)			
	6				13 16		Bottom of Excavation			
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

REMARKS:
Using Auger to try boring to 3'. Auger refusal at approx. 2.5'. Moving north a few feet (S-2'). Could not determine depth to GW.

ST PIT PLAN



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BORING LOG

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PROJECT
RIVER VALLEY CC

Claremont, New Hampshire

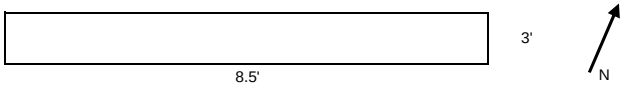
TEST PIT NO. B-5
SHEET 1 of 1
FILE NO. 86880
DATE 7/2/14

Engineer	Andy Robichaud	Rig Type:	Truck Mounted	Ground El.	
Contractor	N.E. Boring	Model:	B59	Datum	
Operator	Ken Smith	Hammer Type:	140 lb	Time Start	10:00
Weather		Hammer Hoist:	Winch	Time End	10:30

PID (ppm)	Depth Below Grade (ft)	Type & No.	Rec. (in.)	Depth (ft.)	Blows/ 6 in.	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Remarks
	1	S-1	16	.5-2	13	Gravel	Asphalt (6") S-1 Gravel (0-16")			
	2				12 10					
	3	S-2	17	2-4	16 11		S-2 Fine Gravel (6-14) Coarse Gravel (14-17)			
	4				13 15		Rock in tip of spoon			
	5	S-3	10	4-6	48 36		S-3 Rock Fragments (0-4) Fine Gravel (4-10)			
	6				44 38	GW				
	7	S-4	21	6-8	28 13	Silt	S-4 Coarse Gravel (0-6) wet Sandy Silt (6-21)			
	8				13 14					
	9				18		Bottom of Excavation			
	10									
	11									
	12									
	13									
	14									
	15									

REMARKS:

ST PIT PLAN



BOULDER	CLASS
12" - 24"	A
24" - 36"	B
>36"	C

OPORTIONS US

0-10%	Trace (Tr. E = Easy
10-20%	Little (Li.) M = Moderate
20-35%	Some (So. D = Difficult
35-50%	And

EXCAVATION EFFORT

BORING LOG

Nobis
Engineering a Sustainable Future
18 Chennel Drive, Concord, NH 03301

PROJECT
RIVER VALLEY CC

Claremont, New Hampshire

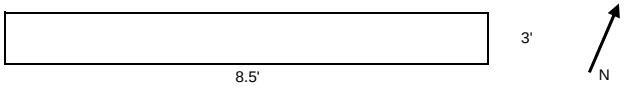
TEST PIT NO. B-6
SHEET 1 of 1
FILE NO. 86880
DATE 7/2/14

Engineer	Andy Robichaud	Rig Type:	Truck Mounted	Ground El.	
Contractor	N.E. Boring	Model:	B59	Datum	
Operator	Ken Smith	Hammer Type:	140 lb	Time Start	10:40
Weather		Hammer Hoist:	Winch	Time End	11:00

PID (ppm)	Depth Below Grade (ft)	Type & No.	Rec. (in.)	Depth (ft.)	Blows/ 6 in.	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Remarks
	1	S-1	5	.5-2	10	Gravel	Asphalt (4")			
					23		S-1 Gravel (0-5)			
	2				22		Rock stuck in tip of spoon			
		S-2	16	2-4	16		S-2 Gravel (0-16)			
	3				13					
					16					
	4				18	GW				
		S-3	17	4-6	30		S-3 Coarse Gravel (0-4) wet			
	5				20		Fine Gravel (4-12)			
					23	Sand	Medium Sand (12-17)			
	6				30					
					56		Bottom of Excavation			
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

REMARKS:

ST PIT PLAN



BOULDER	CLASS
12" - 24"	A
24" - 36"	B
>36"	C

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EXCAVATION EFFORT

BORING LOG

Nobis
Engineering a Sustainable Future
18 Chennel Drive, Concord, NH 03301

PROJECT
RIVER VALLEY CC

Claremont, New Hampshire

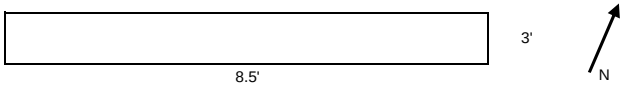
TEST PIT NO. B-7
SHEET 1 of 1
FILE NO. 86880
DATE 7/2/14

Engineer	Andy Robichaud	Rig Type:	Truck Mounted	Ground El.	
Contractor	N.E. Boring	Model:	B59	Datum	
Operator	Ken Smith	Hammer Type:	140 lb	Time Start	11:05
Weather		Hammer Hoist:	Winch	Time End	11:25

PID (ppm)	Depth Below Grade (ft)	Type & No.	Rec. (in.)	Depth (ft.)	Blows/ 6 in.	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Remarks
	1	S-1	12	.5-2	8	Gravel	Asphalt (4") S-1 Gravel (0-12)			
	2				16 15					
	3	S-2	14	2-4	24 13		S-2 Fine Gravel (0-14)			
	4				16 23					
	5	S-3	17	4-6	36 23	Silt	S-3 Fine Gravel (0-10) Sand Silt (10-17) wet			
	6				20 16	GW				
	7				18		Bottom of Excavation			
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

REMARKS:

ST PIT PLAN



BOULDER	CLASS
12" - 24"	A
24" - 36"	B
>36"	C

OPORTIONS US

0-10%	Trace (Tr. E = Easy
10-20%	Little (Li.) M = Moderate
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35-50%	And

EXCAVATION EFFORT

BORING LOG

Nobis
Engineering a Sustainable Future
18 Chennel Drive, Concord, NH 03301

PROJECT
RIVER VALLEY CC

Claremont, New Hampshire

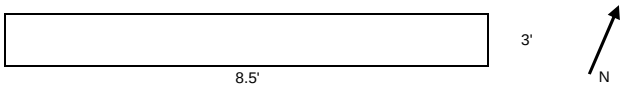
TEST PIT NO. B-8
SHEET 1 of 1
FILE NO. 86880
DATE 7/2/14

Engineer	Andy Robichaud	Rig Type:	Truck Mounted	Ground El.	
Contractor	N.E. Boring	Model:	B59	Datum	
Operator	Ken Smith	Hammer Type:	140 lb	Time Start	11:30
Weather		Hammer Hoist:	Winch	Time End	12:05

PID (ppm)	Depth Below Grade (ft)	Type & No.	Rec. (in.)	Depth (ft.)	Blows/ 6 in.	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Remarks
							Asphalt (4")			
	1	S-1	7	.5-2	8	Gravel	S-1 Gravel (0-7)			
	2				12 24					
	3	S-2	9	2-4	13 10		S-2 Gravel (0-9)			
	4				11 48/4"	Gravel				
	5	S-3	12	4-6	5 8		S-3 Fine Gravel (0-12)			
	6				9 11					
	7	S-4	12	6-7	36 100/4	Sand GW Bedrock	S-4 Fine Gravel (0-6) Medium Sand (6-12) Few rock fragments, wet at tip with weathered rock, possibly bedrock			
	8									
	9						Bottom of Excavation @ 7'			
	10									
	11									
	12									
	13									
	14									
	15									

REMARKS:
Refusal @ 4'. Moving north a few feet and resuming from 4'.
Refusal @ 7'. Weathered rock at spoon tip, possibly bedrock.

ST PIT PLAN



BOULDER	CLASS
12" - 24"	A
24" - 36"	B
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OPORTIONS US

EXCAVATION EFFORT

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BORING LOG

Nobis
Engineering a Sustainable Future
18 Chennel Drive, Concord, NH 03301

PROJECT
RIVER VALLEY CC

Claremont, New Hampshire

TEST PIT NO. B-9
SHEET 1 of 1
FILE NO. 86880
DATE 7/2/14

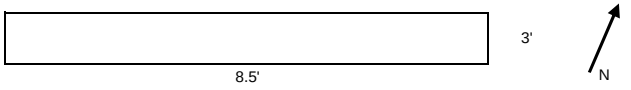
Engineer	Andy Robichaud	Rig Type:	Truck Mounted	Ground El.	
Contractor	N.E. Boring	Model:	B59	Datum	
Operator	Ken Smith	Hammer Type:	140 lb	Time Start	12:10
Weather		Hammer Hoist:	Winch	Time End	12:50

PID (ppm)	Depth Below Grade (ft)	Type & No.	Rec. (in.)	Depth (ft.)	Blows/ 6 in.	Strata Change & Water Level	Subsurface Description	Excavation Effort	Boulder Qty/Class	Remarks
	1	S-1	13	.5-2	7	Gravel	Asphalt (5")			
					13		S-1 Gravel (0-10)			
	2				6		Loam with organic matter (10-12)			
		S-2	0		20		S-2 No recovery/refusal			
	3	S-2'	12	2-4	100/2"	Sand	S-2' Fine Sand (0-12). Numerous			
					18		fragments of weathered rock.			
	4				42		Refusal @ 4'			
					65	Bedrock				
	5				100/5"					
	6									
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									

REMARKS:

Using Auger to try boring to 3'. Auger refusal at approx. 2.5'. Moving north a few feet (S-2'). Could not determine depth to GW.

ST PIT PLAN



BOULDER	CLASS
12" - 24"	A
24" - 36"	B
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OPORTIONS US

EXCAVATION EFFORT

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RIVER VALLEY COMMUNITY COLLEGE

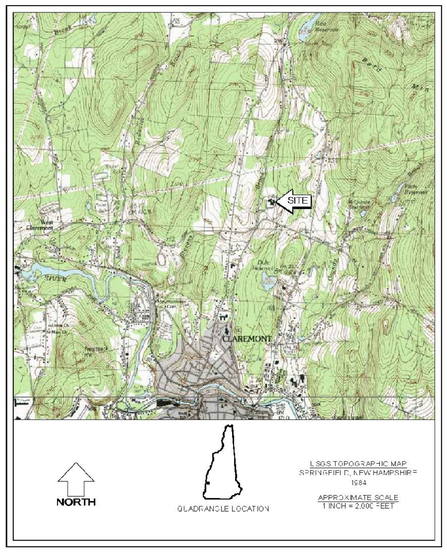
PROJECT #RVC19-02 PARKING LOT RE-PAVING

ONE COLLEGE DRIVE

CLAREMONT, NEW HAMPSHIRE 03743

LEGEND

EXISTING	PROPOSED	
		SUBJECT PROPERTY LINE
		OTHER PROPERTY LINE
		SETBACKS
		STONE WALL
		EDGE OF WETLAND
		TREE LINE
		CENTERLINE
		EDGE OF GRAVEL
		EDGE OF PAVEMENT
VGC	VGC	VERTICAL GRANITE CURB
TD	TD	TIP DOWN
OHW	OHW	OVERHEAD UTILITY WIRE
UGE	UGE	UNDERGROUND ELECTRIC
T	T	UNDERGROUND TELECOM
D	D	DRAIN LINE
UD	UD	UNDER DRAIN
S	S	SANITARY SEWER LINE
W	W	WATER LINE
G	G	GAS LINE
100	100	MAJOR CONTOUR
98	98	MINOR CONTOUR
X	X	SILT FENCE
		GUARD RAIL
		UTILITY POLE
		PAD MOUNTED TRANSFORMER
		DRAIN MANHOLE
		CATCH BASIN
		SANITARY SEWER MANHOLE
		HYDRANT
		WATER VALVE
		WATER SHUT OFF
		WATER SUPPLY WELL
		GAS SHUT OFF
× 100.00	× 100.00	SPOT GRADE
× 100.00TC 99.05 BC	× 100.00TC 99.05 BC	CURB SPOT GRADE
		SIGN POST
		LIGHT POLE
B-1		BORING LOCATION
		TREE
		CONCRETE
		RIP RAP



USGS TOPOGRAPHIC MAP
SPRINGFIELD, NEW HAMPSHIRE
1984

APPROXIMATE SCALE
1 INCH = 2,000 FEET

SHEET INDEX

COMMUNITY COLLEGE system of New Hampshire

STATE OF NEW HAMPSHIRE
MATTHEW E MOORE No. 5382 LICENSED PROFESSIONAL ENGINEER

REVISIONS		
NO	DATE	DESCRIPTION

PARKING LOT RE-PAVING
RIVER VALLEY COMMUNITY COLLEGE

SCALE: AS NOTED

DATE: MARCH 27, 2019

Project Number: RVC 19-02

TITLE: Cover Sheet

Drawing Number

CS

Sheet 1 Of 7

NOTES

1. THE PURPOSE OF THIS PLAN IS TO SHOW PROPOSED CAMPUS IMPROVEMENTS
2. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING DIG SAFE (1-888-DIG-SAFE) AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF WORK. THE CONTRACTOR SHALL COORDINATE WORK WITH THE CITY FIRE, POLICE, AND COMMUNITY DEVELOPMENT DEPARTMENTS.
3. A MANDATORY PRECONSTRUCTION MEETING WILL NEED TO BE HELD TO DISCUSS INSPECTION FEES, CONSTRUCTION SCHEDULES, ETC.
4. REFER TO CONSTRUCTION DETAIL SHEETS FOR ALL APPLICABLE SITE DETAILS.
5. CONTRACTOR SHALL NOTIFY CONTRACT REPRESENTATIVE IMMEDIATELY IF SITE CONDITIONS DIFFER FROM WHAT IS SHOWN ON PLANS.
6. SOIL BORINGS WERE DRILLED BY NEW ENGLAND BORING CONTRACTORS AND OBSERVED BY NOBIS ENGINEERING, INC. ON JULY 2, 2014.
7. REFER TO COVER SHEET FOR GENERAL NOTES AND LEGEND.

SEE SPECIFICATIONS FOR BORINGS INFORMATION

LIMIT OF WORK

ROUTE 120

B-1 B-2 B-3 B-4 B-5 B-6 B-7 B-8 B-9

C-2

0 50' 100'
GRAPHIC SCALE

COMMUNITY COLLEGE system of New Hampshire

STATE OF NEW HAMPSHIRE · MATTHEW F. MOORE No. 5382 LICENSED PROFESSIONAL ENGINEER

REVISIONS		
NO	DATE	DESCRIPTION

PARKING LOT RE-PAVING
RIVER VALLEY COMMUNITY COLLEGE

SCALE: AS NOTED

DATE: MARCH 27, 2019

Project Number: RVC 19-02

TITLE: Overall Site Plan

Drawing Number
C-1
Sheet 2 Of 7

NOTES:

1. REFER TO SHEET C-1 OVERVIEW FOR ADDITIONAL NOTES.

0 20' 40'
GRAPHIC SCALE

COMMUNITY COLLEGE
system of New Hampshire

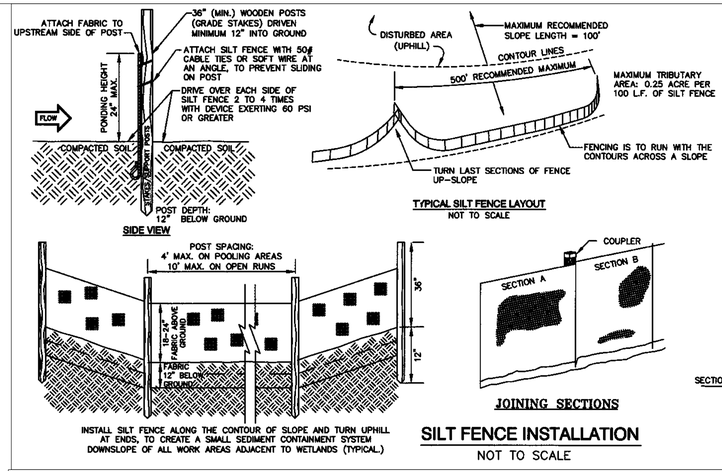
STATE OF NEW HAMPSHIRE
MATTHEW E. MOORE
No. 5382
LICENSED
PROFESSIONAL ENGINEER

REVISIONS		
NO	DATE	DESCRIPTION

PARKING LOT RE-PAVING
RIVER VALLEY COMMUNITY COLLEGE

SCALE: AS NOTED
DATE: MARCH 27, 2019
Project Number: RVC 19-02
TITLE: Parking Plan

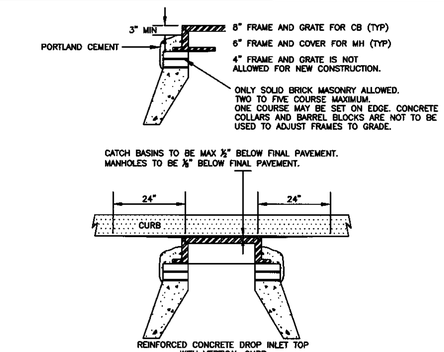
Drawing Number
C-2
Sheet 3 Of 7



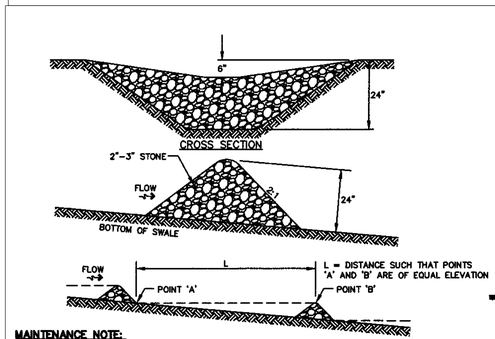
SPECIFICATIONS FOR SILT FENCE INSTALLATION

1. INSTALL POSTS 4 FEET APART IN CRITICAL WATER RETENTION AREAS AND 6–10 FEET APART ON STANDARD APPLICATIONS.
2. INSTALL POSTS 12 INCHES DEEP ON THE DOWN HILL SIDE OF THE SILT FENCE, AND AS CLOSE AS POSSIBLE TO THE FABRIC.
3. SECURELY ATTACH THE FABRIC TO EACH POST WITH TIES SECURED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 2" VERTICALLY APART.
4. WRAP APPROXIMATELY 6 INCHES OF FABRIC AROUND THE END POSTS AND SECURE WITH 3 TIES.
5. THE INSTALLATION SHOULD BE CHECKED AND CORRECTED FOR ANY DEVIATIONS BEFORE COMPACTION. USE A FLAT-BLADED SHOVEL TO TUCK FABRIC DEEPER INTO THE SILT IF NECESSARY.
6. COMPACTING IS VITALLY IMPORTANT FOR EFFECTIVE RESULTS. COMPACT THE SOIL IMMEDIATELY NEXT TO THE SILT FENCE FABRIC WITH THE FRONT WHEEL OF THE TRACTOR, SKID STEER, OR ROLLER EXERTING AT LEAST 60 POUNDS PER SQUARE INCH.

SILT FENCE INSTALLATION
NOT TO SCALE



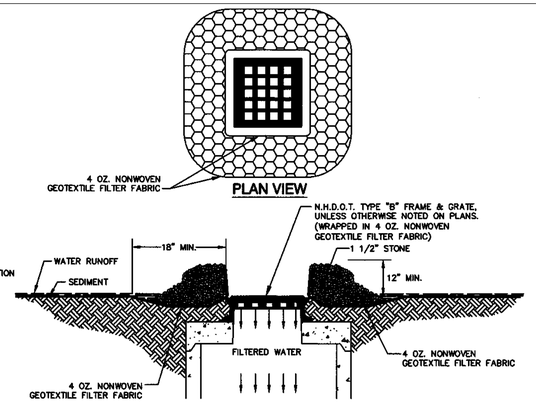
ADJUSTING FRAMES TO GRADE
NOT TO SCALE



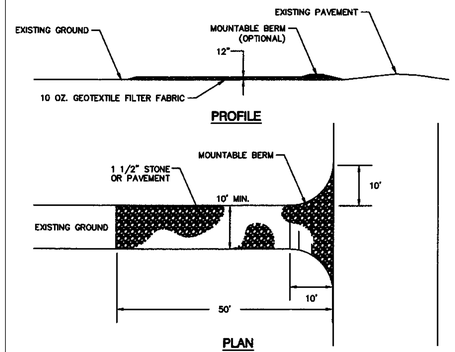
MAINTENANCE NOTE:

1. STONE CHECK DAMS SHOULD BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY NECESSARY REPAIRS SHOULD BE MADE IMMEDIATELY. PARTICULAR ATTENTION SHOULD BE GIVEN TO END RUN AND EROSION AT THE DOWNSTREAM TOE OF THE STRUCTURE. WHEN THE STRUCTURES ARE REMOVED, THE DISTURBED PORTION SHOULD BE BROUGHT TO THE EXISTING CHANNEL GRADE AND THE AREAS PREPARED, SEEDED AND MULCHED. WHILE THIS PRACTICE IS NOT INTENDED TO BE USED PRIMARILY FOR SEDIMENT TRAPPING, SOME SEDIMENT WILL ACCUMULATE BEHIND THE STRUCTURES. SEDIMENT SHALL BE REMOVED FROM BEHIND THE STRUCTURES WHEN IT HAS ACCUMULATED TO ONE HALF OF THE ORIGINAL HEIGHT OF THE STRUCTURE.

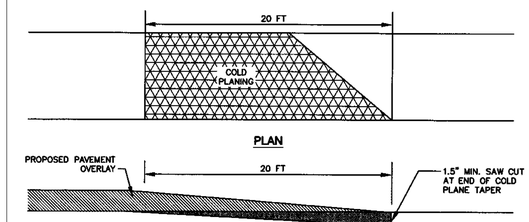
STONE CHECK DAM
NOT TO SCALE



TEMPORARY CATCH BASIN INLET PROTECTION
NOT TO SCALE



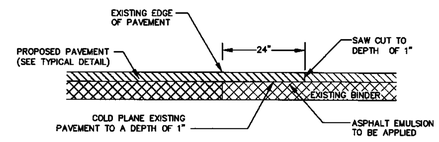
TRACKING PAD DETAIL
NOT TO SCALE



EXISTING PAVEMENT SHALL BE COLD PLANED FOR A LENGTH OF 20' TAPERING FROM 0" TO 1.5" MIN. DEPTH THROUGHOUT THE ENTIRE WIDTH OF THE PAVEMENT TO BE OVERLAID. ROADWAYS WHERE ORDERED

SECTION

PAVEMENT OVERLAY
NOT TO SCALE



PAVEMENT COLD PLANING AND JOINT
NOT TO SCALE

COMMUNITY COLLEGE system of New Hampshire

STATE OF NEW HAMPSHIRE · MATTHEW E. MOORE No. 5382 · LICENSED PROFESSIONAL ENGINEER

REVISIONS		
NO	DATE	DESCRIPTION

PARKING LOT RE-PAVING
RIVER VALLEY COMMUNITY COLLEGE

SCALE: AS NOTED
DATE: MARCH 27, 2019
Project Number: RVC 19-02
TITLE: Construction Details

Drawing Number
C-3
Sheet 4 Of 7

EROSION CONTROL NOTES:

CATCH BASINS: CARE SHOULD BE TAKEN TO ENSURE THAT SEDIMENTS DO NOT ENTER CATCH BASINS DURING EXCAVATION FOR PIPE TRENCHES, DITCHES AND SWALES. THE CONTRACTOR SHOULD PLACE NON-WOVEN GEOTEXTILE FABRIC FOR INLET PROTECTION OVER INLETS IN AREAS OF SOIL DISTURBANCE, WHICH ARE SUBJECT TO SEDIMENT CONTAMINATION.

PLACE INLET PROTECTION DEVICES, IN CATCH BASINS AND MAINTAIN UNTIL ALL CONSTRUCTION ACTIVITIES HAVE CEASED AND THE SURROUNDING AREAS ARE WELL VEGETATED.

ALL SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF INTO THEM.

SCHEDULE OF WORK
NO WINTER EARTH DISTURBANCE IS EXPECTED FOR THIS PROJECT. SHOULD WINTER WORK BE REQUIRED, THIS PLAN SHALL BE MODIFIED ACCORDINGLY.

ADEQUATE MEASURES SHOULD BE TAKEN TO MINIMIZE AIR BORNE DUST PARTICLES ARISING FROM SOIL DISTURBANCE AND CONSTRUCTION.

* DISTURBANCE OF AREAS SHOULD BE MINIMIZED AND NOT EXCEED 50,000 SQUARE FEET IN AREA AT ANY ONE TIME.
* NO DISTURBED AREA SHOULD BE LEFT UNSTABILIZED FOR LONGER THAN TWO WEEKS DURING THE GROWING SEASON.
* PERMANENT EROSION CONTROL FEATURES SHOULD BE INCORPORATED INTO THE PROJECT AT THE EARLIEST PRACTICABLE TIME, AS SPECIFIED ON THE CONTRACT PLANS.
* WITHIN 14 DAYS OF COMPLETING WORK IN AN AREA, AND PRIOR TO ANTICIPATED RAIN EVENTS, APPLY HAY/STRAW MULCH AND TACKIFIER ON ALL DISTURBED SOIL AREAS. APPLICATION RATES OF 2 TONS OF STRAW OR HAY PER ACRE SHOULD BE USED TO PREVENT EROSION UNTIL VEGETATIVE COVER CAN BE ESTABLISHED. ALTERNATIVELY, APPLY WOOD CHIPS OR GROUND BARK MULCH 2 TO 6 INCHES DEEP AT A RATE OF 10 TO 20 TONS PER ACRE.
* WHEN EROSION IS LIKELY TO BE A PROBLEM, GRUBBING OPERATION SHOULD BE SCHEDULED AND PERFORMED SUCH THAT GRADING OPERATION AND PERMANENT EROSION CONTROL FEATURES CAN FOLLOW IMMEDIATELY THEREAFTER.
* AS WORK PROGRESSES, PATCH SEEDING AND MULCHING SHOULD BE DONE AS REQUIRED ON AREAS PREVIOUSLY TREATED TO MAINTAIN OR ESTABLISH PROTECTIVE COVER.
* REMOVE ACCUMULATED SEDIMENTS AND DEBRIS WHEN SEDIMENT CONTAINMENT DEVICES REACH 33% CAPACITY.

EROSION CONTROL IMPLEMENTATION SCHEDULE
THE FOLLOWING GENERAL SCHEDULE IDENTIFIES THE PROPOSED SOIL EROSION AND SEDIMENT CONTROL AND STORM WATER MANAGEMENT MEASURES THAT ARE TO BE IMPLEMENTED PRIOR TO AND DURING CONSTRUCTION:

* PERFORM LIMITED GRUBBING, STRIPPING AND SITE GRADING ONLY AS NEEDED TO COMPLETE IMMEDIATE WORK GOALS.
* BLOCK STORM WATER FLOW AS NECESSARY TO INSTALL ALL STORM WATER STRUCTURES IN THE DRY.
* INSTALL PERMANENT STORM DRAIN SYSTEM.
* INSTALL TEMPORARY SOIL STABILIZATION MEASURE INCLUDING SEED, MULCH, FERTILIZER, MATTING, ETC.
* REDIRECT FLOWS INTO FINISHED STRUCTURES PRIOR TO FILL OPERATIONS.
* PLACE HUMUS AND CONDUCT PERMANENT SEEDING AND MULCHING OF ALL DISTURBED GROUND.

TEMPORARY STABILIZATION:
EROSION CONTROL MEASURES SHALL BE IMPLEMENTED, AS WRITTEN HEREIN AND AS DEPICTED ON THE ACCOMPANYING PLAN, FROM THE COMMENCEMENT OF CONSTRUCTION ACTIVITY UNTIL FINAL STABILIZATION IS COMPLETE:

TEMPORARY GRADING: TEMPORARY GRADING DURING CONSTRUCTION SHOULD BE PERFORMED IN SUCH A MANNER TO FACILITATE MAXIMUM INFILTRATION OF STORMWATER AND MINIMIZE OR ELIMINATE STORMWATER RUNOFF FROM THE SITE.

MULCH: MULCHING WITH LOOSE HAY OR STRAW, AT A RATE OF 2 TONS PER ACRE, SHALL BE DONE IMMEDIATELY AFTER EACH AREA HAS BEEN FINAL GRADED. WHEN SEED FOR EROSION CONTROL IS SOWN PRIOR TO PLACING THE MULCH, THE MULCH SHOULD BE PLACED ON THE SEEDED AREAS WITHIN 48 HOURS AFTER SEEDING.

TACKIFIER: PLACEMENT OF SOIL TACKIFIER HAS PROVEN TO BE AN EFFECTIVE METHOD OF PREVENTING SOIL AND ADHERING MULCH IN PLACE. THE PLACEMENT OF A SOIL TACKIFIER SHOULD BE PERFORMED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS AND SHOULD BE REAPPLIED AS NECESSARY TO CONTROL AIR BORN DUST AND SOIL, AND MULCH LOSS UNTIL PERMANENT VEGETATION IS ESTABLISHED.

ROAD CLEANING: THE CONTRACTOR SHALL SWEEP ROADS DAILY, OR AS NEEDED TO MAINTAIN CLEAN PAVED SURFACES AT ALL CONSTRUCTION ACCESS/EGRESS POINTS.

DUST CONTROL: THE CONTRACTOR SHALL IMPLEMENT DUST CONTROL MEASURES AS NEEDED TO PREVENT AIRBORNE DUST PARTICLES FROM LEAVING THE SITE. DUST CONTROL MEASURES SHALL CONSIST OF USE OF A WATER TRUCK EQUIPPED WITH A SPRAY-BAR THAT DISSIPATES THE WATER EVENLY OVER THE SURFACE.

PERMANENT STABILIZATION: GRASS, TREES, SHRUBS AND MULCHED PLANTING BEDS WILL BE CONSTRUCTED AND MAINTAINED IN LOCATIONS AS SHOWN ON THE DRAWINGS TO STABILIZE AREAS NOT WITHIN THE PARKING LOT/BUILDING FOOTPRINT. THE CONTRACTOR WILL BE RESPONSIBLE FOR EROSION AND SEDIMENT CONTROL FOR ONE YEAR AFTER COMPLETION.

AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
1. BASE COARSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
2. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
3. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED;
4. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

ALL ROADWAYS/PARKING AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.

EXCAVATION DEWATERING:
SHOULD EXCAVATION DEWATERING BE REQUIRED, THE CONTRACTOR MUST INSURE THAT ANY EXCAVATION DEWATERING DISCHARGES ARE NOT CONTAMINATED. NOTE: THE WATER IS CONSIDERED UNCONTAMINATED IF THERE IS NO GROUNDWATER CONTAMINATION WITHIN 1,000 FEET OF THE DISCHARGE.

THE CONTRACTOR MUST TREAT ANY UNCONTAMINATED EXCAVATION DEWATERING AS NECESSARY TO REMOVE SUSPENDED SOLIDS AND TURBIDITY DURING CONSTRUCTION. THE DISCHARGES MUST BE SAMPLED AT A LOCATION PRIOR TO MIXING WITH STORM WATER OR STREAM FLOW AT LEAST ONCE PER WEEK DURING WEEKS WHEN DISCHARGES OCCUR. THE SAMPLES MUST BE ANALYZED FOR TOTAL SUSPENDED SOLIDS (TSS) AND MUST MEET MONTHLY AVERAGE AND MAXIMUM DAILY TSS LIMITATIONS OF 50 MILLIGRAMS PER LITER (MG/L), RESPECTIVELY.

SPECIFICATIONS FOR TEMPORARY AND PERMANENT SEEDING:

GRASS SEED MIXES SHALL CONSIST OF THE MIXTURES AS DETAILED IN THE FOLLOWING TABLES, WITH 98% PURITY:

EROSION CONTROL SEED MIX		
SEED	BY % MASS	% GERMINATION (MIN.)
WINTER RYE 80 (MIN.)	80 (MIN.)	85
RED FESCUE (CREEPING)	4 (MIN.)	80
PERENNIAL RYE GRASS	3 (MIN.)	90
RED CLOVER	3 (MIN.)	90
OTHER CROP GRASS	0.5 (MAX.)	
NOXIOUS WEED SEED	0.5 (MAX.)	
INERT MATTER	1.0 (MAX.)	

PERMENANT SEED MIX		
SEED	BY % MASS	% GERMINATION (MIN.)
RED FESCUE (CREEPING)	50	85
KENTUCKY BLUE	25	85
PERENNIAL RYE GRASS	10	90
RED TOP	10	85
LANDINO CLOVER	5	85

WINTER CONSTRUCTION NOTES:

ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE ELSEWHERE. MULCH REMAINING IN THE SPRING SHALL BE REMOVED AND REPLACED AT RATE OF 2 TONS PER ACRE. THE PLACEMENT OF EROSION CONTROL BLANKETS OR MULCH AND TACKIFIER SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND.

ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.

AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3-INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3 OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT.

SECTION 31 20 00
EARTH MOVING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Preparing subgrades for structures, utilities, pavements, asphalt and concrete walks, turf and grasses, and plants.
2. Excavating for structures, utilities, and pavements.
3. Drainage course for concrete structures and slabs.
4. Subbase course and base course for bituminous (asphalt) paving.
5. Backfilling for utility trenches and pavements.
6. Replacing excavated or unsuitable material with select fill material, common fill material, or base course material.
7. Complying with compaction requirements.
8. Rough grading.

1.2 DEFINITIONS

A. Backfill: Soil material used to fill an excavation.

1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
2. Final Backfill: Backfill placed over initial backfill to fill a trench.

B. Base Course: Aggregate layer placed between the subbase course and hot-mix asphalt paving.

C. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.

D. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.

E. Drainage Course: Aggregate layer supporting the slab-on-grade that also minimizes upward capillary flow of pore water.

F. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.

1. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Architect. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
2. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Architect. Unauthorized excavation, as well as remedial work directed by Architect, shall be without additional compensation.

G. Fill: Soil materials used to raise existing grades.

H. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.

I. Subbase Course: Aggregate layer placed between the subgrade and base course for hot-mix asphalt pavement, or aggregate layer placed between the subgrade and a cement concrete pavement or a cement concrete or hot-mix asphalt walk.

J. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.

K. Utilities: On-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.

L. Topsoil: Friable, fertile, natural, free-draining loam typical of the locality placed over subgrade in vegetated (grassed) areas.

1.3 QUALITY ASSURANCE

A. Pre-excavation Conference: Conduct conference at Project site. Conference can be conducted during preconstruction/kickoff meeting.

1.4 PROJECT CONDITIONS

A. Utility Locator Service: Notify utility locator service for area where Project is located before beginning earth moving operations.

1.5 SUBMITTALS

A. Submit 25-lb. samples as requested by Owner's Representative of each type of imported fill material in containers to an independent geotechnical testing agency.

B. Testing and analysis results for backfill and fill materials.

C. Source information for backfill and fill materials.

D. Submit the qualifications of the independent geotechnical testing laboratory performing soil testing and inspection services during earthwork operations. The geotechnical testing laboratory must demonstrate to the Owner's Representative satisfaction, based on evaluation of laboratory submitted criteria conforming to ASTM D3740, that is has the experience and capability to conduct required field and laboratory geotechnical testing. Laboratory shall be supervised by a Registered Professional Engineer in the State of New Hampshire.

E. Provide records of utility locations to Owner's Representative prior to Substantial Completion.

1.6 TESTS

A. Owner will employ a certified, independent testing laboratory to perform field and laboratory material evaluation tests. Materials and installed work may require testing and retesting at any time during progress of work. Retesting of rejected materials and/or improperly installed work, shall be done at Contractor's expense.

B. Tests and analysis of fill materials will be performed as follows:

Material	Test	ASTM	Frequency
Common Borrow	Grain Size	422	new source
	Proctor	1557	new source
Bedding Sand	Grain Size	422	new source
	Proctor	1557	new source
Bank Run Gravel	Grain Size	422	1 per source or new source
	Proctor	1557	1 per source or new source
Crushed Gravel	Grain Size	422	1 per source or new source
	Proctor	1557	1 per source or new source
¾" Crushed Stone	Grain Size	422	1 per source or new source
¾" Washed Stone	Grain Size	422	1 per source or new source

C. In-place tests and analysis of fill materials shall be performed as follows:

Material	Test	ASTM	Frequency
Common Borrow	Compaction	2922/D1557	1 per lift
Bedding Sand	Compaction	2922/D1557	1 per lift
Bank Run Gravel	Compaction	2922/D1557	1 per lift
Crushed Gravel	Compaction	2922/D1557	1 per lift

D. The Engineer reserves the right to modify the frequency of tests outlined above.

E. Any corrective work required as a result of testing materials and installed work shall be performed by the Contractor at no additional cost to Owner.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations, as determined by Owner's Representative.

B. All fill material shall be subject to the approval of the Owner's Representative.

C. Contaminated soil or fill material to be transported off-site shall not be removed prior to notification and consent of the Owner's Representative.

D. Satisfactory Soils: Soil Classification Groups GW, GP, GM, SW, SP, and SM according to ASTM D 2487, or a combination of these groups; free of rock or gravel larger than 6-inches in any dimension, debris, concrete or other rubble, waste, organic matter, muck, peat, frozen materials, vegetation, and other deleterious matter.

E. Unsatisfactory Soils: Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D 2487, or a combination of these groups.

1. Fills: Topsoil; frozen materials; construction materials and materials subject to decomposition; debris; concrete or other rubble; clods of clay and stones larger than 6-inches; organic material, including silts, which are unstable; and inorganic materials, including silts, too wet to be stable and any material with a liquid limit and plasticity index exceeding 40 and 15 respectively.

2. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction, as defined by ASTM D 1557.

3. Existing Subgrade (Except Footing Subgrade): Same materials as 2.1.E.1, that are not capable of direct support of slabs, pavement, and similar items with possible exception of improvement by compaction, proofrolling, or similar methods.

4. Existing Subgrade (Footings Only): Same as 2.1.E.1, but no fill or backfill.

F. Clean Common Granular Fill Material (Common Borrow)

1. Common fill shall not contain ice or snow, topsoil, roots, stumps or other deleterious materials. Granular fill shall have a liquid limit and a plasticity index not exceeding 20 and 5, respectively. It shall have physical properties which allow it to be easily spread and compacted and have the following gradation:

U.S. Sieve Size	% passing (by weight)
6-inch*	100
No. 4	40-85
No. 40	15-65
No. 200	0-20

*The maximum stone size is not to exceed 3/4 of the compacted thickness of the layer being placed.

G. Clean Bank Run Gravel

1. Gravel shall meet the standards of NHDOT 304.2, as listed below:

U.S. Sieve Size	% passing (by weight)
6-inch	100
No. 4	25-70
No. 200	0-12*

*Based on the fraction passing the No. 4 sieve

H. Clean Crushed Gravel

1. Crushed Gravel shall meet the standards of NHDOT 304.3, as listed below:

U.S. Sieve Size	% passing (by weight)
3-inch	100
2-inch	95-100
1-inch	55-85
No. 4	27-52
No. 200	0-12*

*Based on the fraction passing the No. 4 sieve

I. Bedding Sand

1. Bedding sand shall be clean medium to coarse textured sand and shall meet the standards of NHDOT 304.1, as listed below:

U.S. Sieve Size	% passing (by weight)
1/2 inch	100
No. 4	70-100
No. 200	0-12*

*Based on the fraction passing the No. 4 sieve

J. 3/4-Inch Crushed Stone

1. Use NHDOT Section 703 Table 1E Coarse Aggregate Standard Stone #67. Stone shall consist of clean, washed, hard, durable stone free from sand, loam, clay, excess fines and deleterious materials, and shall have particle size limits as follows:

U.S. Sieve Size	% passing (by weight)
1 inch	100
3/4 inch	90-100
3/8 inch	20-55
No. 4	0-10
No. 8	0-5

K. 3/4-Inch Washed Stone

1. Washed stone shall consist of clean, washed, hard, durable stone free from sand, loam, clay, excess fines and deleterious materials, and shall have particle size limits as follows:

U.S. Sieve Size	% passing (by weight)
1 inch	100
3/4 inch	95-100
1/2 inch	35-70
3/8 inch	0-25

L. Other Material:

1. All other material, not specifically described but required for proper completion of the work, shall be selected by the Contractor and submitted to the Engineer for review.

COMMUNITY COLLEGE system of New Hampshire

STATE OF NEW HAMPSHIRE — MATTHEW E. MOORE No. 9382 LICENSED PROFESSIONAL ENGINEER

REVISIONS		
NO	DATE	DESCRIPTION

PARKING LOT RE-PAVING
RIVER VALLEY COMMUNITY COLLEGE

SCALE: AS NOTED
DATE: MARCH 27, 2019
Project Number: RVC 19-02
TITLE: Specifications

Drawing Number
C-4
Sheet 5 0f 7

2.2 ACCESSORIES

A. Warning Tape: Acid- and alkali-resistant, polyethylene film warning tape manufactured for marking and identifying underground utilities, 6 inches wide and 4 mils thick, continuously inscribed with a description of the utility; colored to comply with local practice or requirements of authorities having jurisdiction.

B. Detectable Warning Tape: Acid- and alkali-resistant, polyethylene film warning tape manufactured for marking and identifying underground utilities, a minimum of 6 inches wide and 4 mils thick, continuously inscribed with a description of the utility, with metallic core encased in a protective jacket for corrosion protection, detectable by metal detector when tape is buried up to 30 inches deep; colored to comply with local practice or requirements of authorities having jurisdiction.

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth moving operations.

B. Protect and maintain erosion and sedimentation controls during earth moving operations.

C. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

D. Remove all water, snow, ice and debris from areas to be backfilled.

E. Comply fully with Dust Control Plan per City of Claremont Fugitive Dust Ordinance.

F. A stockpiling area shall be prepared prior to excavation, for possible storage of clean soils. The stockpiling area should be prepared according to the following guidelines.

1. Determine the dimensions and location of the stockpile area; the area should be selected so that the estimated volume of overlying clean soil can be placed in a stockpile whose sides do not exceed a 2.5H:1V slope.
2. The actual length and width dimensions of the area may be adjusted as necessary to accommodate the available workspace.
3. The stockpile area should be constructed so that there is an overall slope towards one corner (approximately 0.5% grade) so that accumulated groundwater runoff can be treated.
4. Prepare the area by removing any loose material and grading the existing soil to provide the 0.5% grade needed to facilitate runoff.
5. Place sandbags along the outside perimeter of the trough to act as a berm which will help to contain runoff, as needed.

G. Install warning tape directly above utilities as shown on the Contract Drawings. Where no information is provided on the Contract Drawings, install warning tape 12 inches below finished grade, except 6 inches below subgrade under pavements and slabs.

3.10 SOIL FILL

A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.

B. Place and compact fill material in layers to required elevations as follows:

1. Under grass and planted areas, use satisfactory soil (common fill) material.
2. Under impervious walks and pavements, use common fill for raise-in-grade fill and use crushed gravel and bank run gravel per the Contract Drawings.
3. Under steps and ramps, use common fill for raise-in-grade fill and use crushed gravel and bank run gravel per the Contract Drawings.
4. Under exterior concrete slabs, use crushed gravel.
5. Under exterior concrete slabs, if groundwater is encountered, use a maximum 6-inch lift of 3/4-inch crushed stone.
6. Under storm drainage and sanitary structures, use 3/4-inch crushed stone.
7. Around storm pipes, use 3/4-inch crushed stone.
8. Around underground conduit, use bedding sand.
9. In underdrain, use 3/4-inch washed stone.

3.11 SOIL MOISTURE CONTROL

A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.

1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.
2. Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

3.12 COMPACTION OF SOIL BACKFILLS AND FILLS

A. Place backfill and fill soil materials in layers not more than 12-inches in loose depth for material compacted by heavy compaction equipment, and not more than 8-inches in loose depth for material compacted by hand-operated tampers or walk behind vibratory plate compactors.

B. Place backfill and fill soil materials evenly on all sides of structures to required elevations, and uniformly along the full length of each structure.

6. At the lowest elevation corner of the stockpile area dig a sump area which shall collect any runoff. The sump area should be approximately 4 feet in diameter and approximately 2 feet deep.

3.2 EXCAVATION, GENERAL

A. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, boulders, soil materials, and obstructions up to one cubic yard or more in volume for trench excavations and up to two cubic yards or more in volume for open excavations. When removal of rock, boulders, soil materials, and obstructions greater than one cubic yard or more in volume for trench excavations and up to two cubic yards or more in volume for open excavations is required, the Contractor shall be reimbursed for the volume removed at a unit price to be agreed upon. Changes in the Contract Sum and the Contract Time will be authorized for rock excavation and/or removal of obstructions greater than one cubic yard or more in volume for trench excavations and up to two cubic yards or more in volume for open excavations.

1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.

2. Open cut ledge removal will be defined as rock excavations that are wider than or equal to their depth. Trench ledge removal will be defined as rock excavations that are deeper than they are wide. In situations where ledge is strictly being removed for a utility pipe installation it will be considered trench ledge removal regardless of the trench depth.

3.3 EXCAVATION FOR STRUCTURES

A. Excavate areas for new structures to the indicated lines, elevations, and subgrades provided on the Contract Drawings and as needed to complete work. Extend excavations a sufficient distance from structures for placing and removing concrete formwork, for installing services and other construction, and for inspections.

1. Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.

3.4 EXCAVATION FOR WALKS AND PAVEMENTS

A. Excavate surfaces under walks and pavements to indicated lines, elevations, and subgrades provided on Contract Drawings and as needed to complete work.

C. Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D1557 (Modified Proctor Method):

1. Under turf or unpaved areas, scarify and recompact top 8 inches below subgrade and compact each layer of backfill or fill soil material at 88 percent of maximum dry density.
2. Under walkways and pavements, scarify and recompact top 8 inches below subgrade and compact each layer of backfill or fill soil material at 95 percent of maximum dry density.
3. Under steps and ramps, scarify and recompact top 12 inches of existing subgrade and each layer of backfill or fill soil material at 95 percent of maximum dry density.
4. Under exterior concrete slabs, scarify and recompact top 12 inches of existing subgrade and each layer of backfill or fill soil material at 95 percent of maximum dry density.
5. Around foundation wall, in landscaped areas, scarify and recompact top 12 inches below subgrade and compact each layer of backfill or fill soil material at 90 percent of maximum dry density.
6. Under storm drainage and sanitary structures, compact using 4 passes of walk behind vibratory plate compactor.
7. For utility trenches, compact each layer of backfill soil material at 95 percent of maximum dry density under paved and unpaved areas.

3.13 COMPACTION TESTING FREQUENCY

A. Compaction testing for existing subgrade and each layer (lift) of backfill or fill soil material will be conducted using the following frequency:

1. Under turf or unpaved areas: 1 test per 2,000 SF or less of continuous area. Minimum of two tests per area.
2. Under walkway and pavements: 1 test per 2,000 SF or less of continuous area. Minimum of two tests per area.
3. Under steps and ramps: 1 test per area.
4. Under exterior concrete slabs: 1 test per 2,000 SF or less of continuous area. Minimum of two tests per area.
5. Around foundation walls: 1 test per 100 LF or less of wall length. Minimum of two tests per wall length.
6. Under storm drainage structures: Visually inspect crushed stone has been compacted with vibratory plate compactor.
7. For utility trenches: 1 test per 100 LF or less of trench length. Minimum of two tests per wall length.

3.14 GRADING

A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to lines and elevations indicated.

3.5 EXCAVATION FOR UTILITY TRENCHES

A. Excavate trenches to indicated gradients, lines, depths, and elevations.

B. Excavate trenches to uniform widths to provide clearance on each side of pipe and/or conduit as shown on the Contract Drawings. Excavate trench walls vertically from trench bottom to 12 inches higher than top of pipe or conduit unless otherwise indicated.

C. Trench Bottoms: Excavate and shape trench bottoms to provide uniform bearing and support of pipes and conduit. Shape subgrade to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits. Remove projecting stones and sharp objects along trench subgrade.

1. Excavate trenches 6 inches deeper than elevation required in rock or other unyielding bearing material, and as shown on Contract Drawings elsewhere, to allow for bedding course.

D. Trenches near Trees and Plants to be Protected:

1. Excavate to indicated lines, elevations, and subgrades. Protect existing trees and roots along limits of clearing to the fullest extent possible during excavation activities. Do not break, tear, or chop exposed roots.
2. Do not cut main lateral roots or taproots; cut only smaller roots that interfere with installation of utilities.

3.6 SUBGRADE INSPECTION

A. Proof-roll all subgrade areas with a pneumatic-tired roller, or vibratory plate compactor, using a minimum of 6 passes to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.

1. Protect subgrades from softening, undermining, washout, or damage by rain or water accumulation. Reroute surface water runoff from excavated areas and not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches. When subgrade for foundations has been disturbed by water, remove disturbed material to firm undisturbed material after water is brought under control.

B. All subgrades shall be reviewed by the Owner's Representative prior to proceeding with work. Sufficient time must be allowed for the Owner's Representative to observe and perform any necessary tests on the subgrade.

C. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Owner's Representative, without additional compensation.

B. Site Rough Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to required elevations within the following tolerances:

1. Turf or Unpaved Areas: Plus or minus 1 inch.
2. Walks: Plus or minus 1 inch.
3. Pavements: Plus or minus 1/2 inch.

C. Grading inside Building Lines: Finish subgrade to a tolerance of 1/2 inch when tested with a 10-foot straightedge.

D. Final grading areas to be covered with topsoil and seeded:

1. Excavate to grades shown on the Drawings or as required for landscaping and amenities. Backfill and compact all over-excavated areas at no additional cost to the OWNER. Remove all material, including rocks and boulders to a point at least 4 inches below the finished grade of landscaped areas to be covered with topsoil and seeded.
2. Remove all ruts, hummocks and other uneven surfaces by surface grading prior to placement of fill. Do not place, spread or compact any fill material during unfavorable weather conditions and do not conduct further fill operations until compaction tests indicate acceptable results in previous layers. Do not use frozen materials or place a successive layer of fill on frozen material. Use only approved fill material, free of stumps, trees, trash, organic or other unsuitable material.

3.15 SUBBASE AND BASE COURSES UNDER PAVEMENTS AND WALKS

A. Place subbase course and base course on subgrades free of mud, frost, snow, or ice.

B. On prepared subgrade, place subbase course and base course under pavements and walks as follows:

1. Shape subbase course and base course to required crown elevations and cross-slope grades.
2. Place subbase course and base course that exceeds 6 inches in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches thick or less than 3 inches thick.
3. Aggregate base courses shall be constructed in accordance with NHDOT Standard Specifications, Section 304, except as herein modified.
4. Compact subbase course and base course at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 1557.

3.16 DRAINAGE COURSE UNDER STORM DRAINAGE AND SANITARY STRUCTURES, AND AS SHOWN ON CONTRACT DRAWINGS

A. Place drainage course on subgrades free of mud, frost, snow, or ice.

3.7 UNAUTHORIZED EXCAVATION

A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill, with 28-day compressive strength of 2500 psi, may be used when approved by Owner's Representative.

1. Fill unauthorized excavations under other construction, pipe, or conduit as directed by Owner's Representative.

3.8 STORAGE OF SOIL MATERIALS

A. Stockpile borrow soil materials, excavated satisfactory soil materials, and excavated unsatisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.

1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees or existing buildings.

3.9 UTILITY TRENCH BACKFILL

A. Place backfill on subgrades free of mud, frost, snow, or ice.

B. Place and compact bedding course (sand or crushed stone as indicated on Contract Drawings) on trench bottoms and where indicated on the Contract Drawings. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.

C. Trenches under Footings: Backfill trenches excavated under footings and within 18 inches of bottom of footings with satisfactory soil; fill with concrete to elevation of bottom of footings.

D. Trenches under Asphalt Parking and Walkways, and Concrete Walkways: Provide 4-inch thick, concrete-base slab support for piping or conduit less than 30 inches below surface of roadways. After installing and testing, completely encase piping or conduit in a minimum of 4 inches of concrete before backfilling or placing roadway subbase course.

E. Place and compact initial backfill of select material as shown on the Contract Drawings, to the height shown on the Contract Drawings over the pipe or conduit.

1. Carefully compact initial backfill under pipe haunches and compact evenly up on both sides and along the full length of piping or conduit to avoid damage or displacement of piping or conduit. Coordinate backfilling with utilities testing.

F. Place and compact final backfill of satisfactory soil to final subgrade elevation.

B. On prepared subgrade, place and compact drainage course under cast-in-place concrete slabs and as shown on the Contract Drawings, as follows:

1. Place drainage course in maximum 12" loose lifts.

3.17 FIELD QUALITY CONTROL

A. Testing Agency: Contractor will engage a qualified geotechnical engineering testing agency to perform tests and inspections.

B. Contractor is responsible for scheduling all backfill field compaction testing.

C. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earth moving only after test results for previously completed work comply with requirements.

D. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained. The Contractor shall be responsible for cost associated with re-testing if the initial testing results fail.

3.18 PROTECTION

A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.

B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.

C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.

1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

3.19 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Remove surplus satisfactory soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.

END OF SECTION

COMMUNITY COLLEGE system of New Hampshire

STATE OF NEW HAMPSHIRE — MATTHEW E MOORE No. 5382 LICENSED PROFESSIONAL ENGINEER

REVISIONS			PARKING LOT RE-PAVING RIVER VALLEY COMMUNITY COLLEGE	
NO	DATE	DESCRIPTION	SCALE: AS NOTED	Drawing Number
			DATE: MARCH 27, 2019	C-5
			Project Number: RVC 19-02	Sheet 6 0f 7
			TITLE: Specifications	

SECTION 32 12 16
ASPHALT PAVING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Cold milling of existing hot-mix asphalt pavement.
2. Hot-mix asphalt patching.
3. Hot-mix asphalt paving.
4. Hot-mix asphalt paving overlay.
5. Pavement-marking paint.
6. Testing Requirements.

B. Related Sections:

1. Division 31 Section "Earth Moving" for aggregate subbase and base courses and for aggregate pavement shoulders.

1.2 SUBMITTALS

A. Statement of qualifications for the paving contractor.

B. Material Certificates: For each paving material, from manufacturer, stating that proposed materials to be used for the work comply with the Specifications.

C. Submit 25-lb samples, as requested by the Owner's Representative, in containers for each type of material to Owner's Representative.

1.3 QUALITY ASSURANCE

A. Manufacturer Qualifications: A paving-mix manufacturer registered with and approved by New Hampshire Department of Transportation (NHDOT).

B. Regulatory Requirements: Comply with materials, workmanship, and other applicable requirements of NHDOT for asphalt paving work.

1. Measurement and payment provisions and safety program submittals included in standard specifications do not apply to this Section.

C. Pre-paving Conference: Prior to placing any mix, a pre-paving 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 operations. All field supervisors associated with this operation shall attend this meeting.

1.4 PROJECT CONDITIONS

A. Environmental Limitations: Do not apply asphalt materials if subgrade is wet or excessively damp, if rain is imminent or expected before time required for adequate cure, or if the following conditions are not met:

1. Tack Coat: Minimum surface temperature of 60 deg F.
2. Asphalt Binder Course: Minimum surface temperature of 40 deg F and rising at time of placement.
3. Asphalt Top (Wearing) Course: Minimum surface temperature of 60 deg F at time of placement.

B. Pavement-Marking Paint: Proceed with pavement marking only on clean, dry surfaces and at a minimum ambient or surface temperature of 40 deg F for oil-based materials or 55 deg F for water-based materials, and not exceeding 95 deg F.

PART 2 - PRODUCTS

2.1 AGGREGATES

A. Coarse Aggregate: Shall be in accordance with NHDOT Section 401 for Plant Mix Pavements. Coarse aggregate shall be crushed stone or crushed gravel and shall have a percentage of wear as determined by AASHTO T 96 of not more than 45 percent unless otherwise specified by contract item. In each stockpile, not less than 50 percent by weight of the particles retained on the No. 4 (4.75 mm) sieve shall have at least one fractured face. Stockpiles consisting of a blend of crushed stone and crushed gravel will be permitted so long as the overall consistency of the stockpile is reasonably maintained and the lesser portion of coarse aggregate material does not exceed 10 percent of the total. This percentage shall be determined on the portion of the total sample by weight that is retained on the No. 4 (4.75 mm) laboratory sieve.

B. Fine Aggregate: Shall be in accordance with NHDOT Section 401 for Plant Mix Pavements.

1. Fine aggregate shall consist of sound durable particles of sand, crushed stone, or a combination thereof. Fine aggregate shall be free from clay balls and injurious amounts of organic matter. Stone screening shall be produced from stone at least equal in quality to that specified for coarse aggregate.
2. Fine aggregate may be 100 percent manufactured aggregate for base courses and shall consist of at least 25 percent natural sand for wearing courses. If workability problems occur additional natural sand may be required. Fine aggregate stockpiles containing aggregate larger than 3/8 in (9.5 mm) shall not be used.

C. Mineral Filler: Shall be in accordance with NHDOT Section 401 for Plant Mix Pavements. AASHTO M 17, rock or slag dust, hydraulic cement, or other inert material.

2.2 ASPHALT MATERIALS

A. Asphalt Binder: Shall be in accordance with NHDOT Section 401 for Plant Mix Pavements. AASHTO M 320, PG 64-28.

B. Tack Coat: Shall be in accordance with NHDOT Section 410 for Bituminous Surface Treatment. AASHTO M 140, emulsified asphalt, or AASHTO M 208 cationic emulsified asphalt, slow setting, diluted in water, of suitable grade and consistency for application.

2.3 AUXILIARY MATERIALS

A. Pavement-Marking Paint: Paint shall conform to NHDOT 706, NH 4.11 Ready-Mixed White Traffic Paint and NH 4.12 for Ready-Mixed Yellow Traffic Paint.

1. Pavement markings for parking stalls, edge lines, stop bars, lane arrows, and other markings shall be 4, 6, 12, or 24-inches wide or as specified on the Contract Drawings.
2. Paint material shall not lift from the pavement.
3. Paint material shall not smear or spread under normal traffic conditions.

2.4 MIXES

A. Hot-Mix Asphalt: Dense, hot-laid, hot-mix asphalt plant mixes shall be in accordance with NHDOT Standard Specifications Section 403 Hot Bituminous Pavement, and as approved by NHDOT, and complying with the following requirements:

1. Provide mixes with a history of satisfactory performance in geographical area where Project is located.
2. Binder Course: NHDOT 401 Standard Specification for 3/4 inch Aggregate Pavement.
3. Top Course: NHDOT 401 Standard Specification for 1/2 inch Aggregate Pavement.
4. Overlay: NHDOT 401: Standard Specification for 1/2 inch Aggregate Pavement.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Proof-roll subgrade below pavements with heavy pneumatic-tired equipment to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.

B. Proceed with paving only after unsatisfactory conditions have been corrected.

3.2 COLD MILLING (PLANING)

A. Clean existing pavement surface of loose and deleterious material immediately before cold milling. Remove existing asphalt pavement by cold milling to grades and cross sections indicated on Contract Drawings.

1. Mill a 24-inch wide strip to a depth of 1 inch.

3.3 PATCHING

A. Hot-Mix Asphalt Pavement: Saw cut perimeter of patch, as shown on Contract Drawings, and excavate existing pavement section to sound base. Excavate rectangular or trapezoidal patches, extending 24 inches into adjacent sound pavement, unless otherwise indicated. Cut excavation faces vertically. Remove excavated material. Recompact existing unbound-aggregate base course to form new subgrade.

B. Tack Coat: Apply uniformly to vertical surfaces abutting or projecting into new, hot-mix asphalt paving at a rate of between 0.02 and 0.05 gallons per square yard, in accordance with NHDOT Standard Specifications.

1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.

C. Patching: Fill excavated pavements with hot-mix asphalt base mix for full thickness of patch minus wearing course and, while still hot, compact flush with adjacent surface. Place hot-mix asphalt wearing mix over base mix and compact flush with adjacent surface. Compaction shall be in accordance with NHDOT Standard Specifications.

3.4 SURFACE PREPARATION

A. General: Immediately before placing asphalt materials, remove loose and deleterious material from substrate surfaces. Ensure that prepared subgrade is ready to receive paving.

B. Tack Coat: Apply uniformly to surfaces of existing pavement at a rate of between 0.02 and 0.05 gallons per square yard, in accordance with NHDOT Standard Specifications.

1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.

3.5 HOT-MIX ASPHALT PLACING

A. Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. All courses shall be spread and finished to the required thickness by approved, self contained, self-propelled spreading and finishing machines (pavers). Pavers shall be in accordance with NHDOT Standard Specifications.

1. Spread mix at minimum temperature of 260 deg F.
2. Regulate paver machine speed to obtain smooth, continuous surface free of pulls and tears in asphalt-paving mat.

B. Place asphalt mix by hand to areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted. 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.

C. Place paving in consecutive strips not less than 10 feet wide unless infill edge strips of a lesser width are required.

D. Promptly correct surface irregularities in paving course behind paver. Use suitable hand tools to remove excess material forming high spots. Fill depressions with hot-mix asphalt to prevent segregation of mix; use suitable hand tools to smooth surface.

E. Pavement shall only be placed during daylight hours.

3.6 JOINTS

A. Construct joints to ensure a continuous bond between adjoining paving sections. Construct joints free of depressions, with same texture and smoothness as other sections of hot-mix asphalt course.

1. Clean contact surfaces and apply tack coat to joints.
2. Offset longitudinal joints, in successive courses, a minimum of 6 inches.
3. Offset transverse joints, in successive courses, a minimum of 24 inches.
4. Construct transverse joints at each point where paver ends a day's work and resumes work at a subsequent time. Construct these joints using either "bulkhead" or "papered" method according to AI MS-22, for both "Ending a Lane" and "Resumption of Paving Operations."

3.7 COMPACTION

A. General: Begin compaction as soon as placed hot-mix paving will bear roller weight without excessive displacement. Compact hot-mix paving with hot, hand tampers or with vibratory-plate compactors in areas inaccessible to rollers. All compaction shall be conducted in accordance with NHDOT Standard Specifications.

1. Complete compaction before mix temperature cools to 185 deg F.

B. Breakdown Rolling: Complete breakdown or initial rolling immediately after rolling joints and outside edge. Examine surface immediately after breakdown rolling for indicated crown, grade, and smoothness. Correct laydown and rolling operations to comply with requirements.

C. Intermediate Rolling: Begin intermediate rolling immediately after breakdown rolling while hot-mix asphalt is still hot enough to achieve specified density. Continue rolling until hot-mix asphalt course has been uniformly compacted to the following density:

1. Average Density: 92 percent of reference maximum theoretical density according to AASHTO T 209, but not less than 90 percent nor greater than 96 percent.

D. Finish Rolling: Finish roll paved surfaces to remove roller marks while hot-mix asphalt is still warm.

E. Edge Shaping: While surface is being compacted and finished, trim edges of pavement to proper alignment. Bevel edges while asphalt is still hot; compact thoroughly.

F. Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.

G. Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

H. The finished surface of the pavement shall be uniform in appearance, free from irregularities in contour and shall present a smooth riding surface.

3.8 INSTALLATION TOLERANCES

A. Pavement Thickness: Compact each course to produce the thickness indicated on the Contract Drawings within the following tolerances:

1. Binder Course: Plus or minus 1/2 inch.
2. Top Course: Plus 1/4 inch, no minus.

B. Pavement Surface Smoothness: Compact each course to produce a surface smoothness within the following tolerances as determined by using a 10-foot straightedge applied transversely or longitudinally to paved areas:

1. Binder Course: 1/4 inch.
2. Top Course: 1/8 inch.
3. Crowned Surfaces: Test with crowned template centered and at right angle to crown. Maximum allowable variance from template is 1/4 inch.

3.9 PAVEMENT MARKING

A. Do not apply pavement-marking paint until layout, colors, and placement have been verified with Owner's Representative.

B. Allow paving to age for 2 days before starting pavement marking.

C. Sweep and clean surface to eliminate loose material and dust.

D. Apply paint with mechanical equipment to produce pavement markings, of dimensions indicated, with uniform, straight edges. Apply in two (2) coats at manufacturer's recommended rates to provide a minimum wet film thickness of 15 mils.

3.10 FIELD QUALITY CONTROL

A. Testing Agency: Contractor will engage a qualified testing agency to perform tests and inspections.

B. Replace and compact hot-mix asphalt where core tests were taken.

C. Remove and replace or install additional hot-mix asphalt where test results or measurements indicate that it does not comply with specified requirements.

3.11 DISPOSAL

A. Except for material indicated to be recycled, remove excavated materials from Project site and legally dispose of them off-site.

END OF SECTION

COMMUNITY COLLEGE system of New Hampshire

STATE OF NEW HAMPSHIRE · MATTHEW E. MOORE No. 5382 LICENSED · PROFESSIONAL ENGINEER

REVISIONS		
NO	DATE	DESCRIPTION

PARKING LOT RE-PAVING
RIVER VALLEY COMMUNITY COLLEGE

SCALE: AS NOTED
DATE: MARCH 27, 2019
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TITLE: Specifications

Drawing Number
C-6
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