Summer 2023
Paving / Reclamation
Projects

Bid Specifications

Town of Hartford
Department of Public Works
Town of Hartford
173 Airport Road
White River Jct., Vermont 05001

April 14, 2023
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NOTICE TO CONTRACTORS
PAVEMENT RECLAMATION / BITUMINOUS CONCRETE PAVING
SUMMER 2023

1. **Receipt of Bids:** On behalf of the Town of Hartford, Vermont, (OWNER) will receive sealed bids at the Town of Hartford, Town Managers Office, 171 Bridge Street, White River Jct., Vermont until 2:00 p.m. (local time) on **April 28, 2023**, at which time the bids will be opened and read aloud. The envelopes containing the bids must be sealed and designated as: **"2023 SUMMER PAVING / RECLAMATION PROJECTS"**. The bid opening shall be public, open to all parties, and the TOWN OF HARTFORD.

2. **Project Summary:** The proposed work will consist of pavement maintenance and reclamation of various roads within the limits of the Town of Hartford. Work will include reclamation of existing pavements and resurfacing or shims / overlays of existing street / road pavements and related miscellaneous and restoration work. Erosion/ sedimentation control, dust control, and traffic control shall also be maintained throughout the project duration.

3. **Specifications:** Specifications and bid / contract documents may be obtained at the Town of Hartford, Public Works Facility by calling (802) 295-3622. All questions concerning the specifications and bid / contract documents shall be directed, in writing or electronically, to the Town of Hartford, Director of Public Works or to Christopher Holzwarth, Project Manager at cholzwarth@hartford-vt.org.

4. **Construction Schedule:** The Bidder shall commence work under this contract on or before a date to be specified in the NOTICE TO PROCEED and to fully complete all project segments within ninety (90) consecutive calendar days. The Contractor shall submit at the Preconstruction Meeting a detailed schedule of construction activities; see Section 1200, Project Meetings for additional detail concerning the schedule of construction activities.

5. **Award of Contract:** The Owner reserves the right to reject any and all Bids and to waive any irregularity in Bidding. The Owner reserves the right to award multiple contracts to multiple Bidders. The successful Bidder(s) will be required to furnish the necessary Bonds and Insurance Certificates.

6. **Performance Bond:** The successful Bidder(s) shall execute a Performance Bond in the amount of one hundred percent (100%) of the Bid Price. The Bidder, Owner and a Surety Company shall execute Bond.

7. **Payment Bond:** The successful bidder shall provide a Payment Bond in the amount of one hundred percent (100%) of the Bid Price, executed between the Bidder, Owner, and a Surety Company.

8. **Bid Bond:** All bids must be submitted with a Bid Bond in the amount of five percent (5%) of the Bid Price executed between the Bidder and the Surety Company.

END OF SECTION
Project Summary

The following is a summary of the proposed projects to be performed under the terms and conditions of this Contract Document.

The following project descriptions are for illustrative purposes only and do not commit the Owners to perform the work described or to limit work performed under the terms, conditions and specification contained in this document to only those projects described below. The Owner reserves the right to change project scopes prior to the issuance of Purchase Orders against this Contract.

Town of Hartford

(Item #1a) Bituminous Concrete Reclamation (Method B): Reclaim existing pavements using Method B (Pave with an average base depth of 2" of ¾" bituminous concrete base under Item #2 and an average overlay depth of 1" of ½" bituminous concrete wearing surface course under Item #3a, and complete driveway aprons under Item #3a on the following streets and roads.

<table>
<thead>
<tr>
<th>Street Name</th>
<th>Length and Width Approximate</th>
<th>Square Yards Estimated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fowler Lane</td>
<td>565 LF x 15.4' AVG.</td>
<td>967</td>
</tr>
<tr>
<td>Estimated Total</td>
<td>N/A</td>
<td>967</td>
</tr>
</tbody>
</table>

(Item #1b) Pavement Reclamation Only (Method C): Reclaim existing pavements only using a power operated planning machine or grinder per Method C to a depth as noted (Pave with an average overlay depth as noted of ½" bituminous concrete wearing surface course and complete driveway aprons under Items #3b and #3c on the following streets and roads.

<table>
<thead>
<tr>
<th>Street Name</th>
<th>Length and Width Approximate</th>
<th>Square Yards Estimated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian Street (6+64-18+12)</td>
<td>1,148 LF x 24'x 2&quot; AVG.</td>
<td>3,061</td>
</tr>
<tr>
<td>Christian Street (19+62-35+24)</td>
<td>1,562 LF x 24'x 2&quot; AVG.</td>
<td>4,165</td>
</tr>
<tr>
<td>Dothan Road (34+50-55+00)</td>
<td>2,050 LF x 22'x 1.5&quot; AVG.</td>
<td>5,011</td>
</tr>
<tr>
<td>Dothan Road (67+50-75+00)</td>
<td>750 LF x 22'x 1.5&quot; AVG.</td>
<td>1,833</td>
</tr>
<tr>
<td>Estimated Total</td>
<td>N/A</td>
<td>14,070</td>
</tr>
</tbody>
</table>
(Item #2) 2" Bituminous Concrete Base Course Pavement: Pave with an average depth of 2" of 
¾" Type II bituminous concrete base course on the following streets and roads.

<table>
<thead>
<tr>
<th>Street Name</th>
<th>Length and Width Approximate</th>
<th>Tonnage Estimated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian Street (18+12-19+62)</td>
<td>150 LF x 24' AVG.</td>
<td>46</td>
</tr>
<tr>
<td>Fowler Lane</td>
<td>565 LF x 15.4' AVG.</td>
<td>110</td>
</tr>
<tr>
<td>Estimated Total</td>
<td>Varies</td>
<td>156</td>
</tr>
</tbody>
</table>

(Item #3a) Overlay Pavement: Finish pave with an average depth of 1" of Type III ½" bituminous 
concrete wearing course on the following streets and roads.

<table>
<thead>
<tr>
<th>Street Name</th>
<th>Length and Width Approximate</th>
<th>Tonnage Estimated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fowler Lane</td>
<td>565 LF x 15.4' AVG.</td>
<td>55</td>
</tr>
<tr>
<td>Fowler Lane (Misc. Pav.)</td>
<td>Varies</td>
<td>19</td>
</tr>
<tr>
<td>Estimated Total</td>
<td>Varies</td>
<td>74</td>
</tr>
</tbody>
</table>

(Item #3b) Overlay Pavement: Finish pave with an average depth of 1.5" of Type III ½" bituminous 
concrete wearing course on the following streets and roads.

<table>
<thead>
<tr>
<th>Street Name</th>
<th>Length and Width Approximate</th>
<th>Tonnage Estimated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dothan Road (34+50-55+00)</td>
<td>2,050 LF x 22'x 1.5&quot; AVG.</td>
<td>428</td>
</tr>
<tr>
<td>Dothan Road (67+50-75+00)</td>
<td>750 LF x 22'x 1.5&quot; AVG.</td>
<td>157</td>
</tr>
<tr>
<td>Dothan Road (Misc. Pav.)</td>
<td>Varies</td>
<td>47</td>
</tr>
<tr>
<td>Estimated Total</td>
<td>Varies</td>
<td>632</td>
</tr>
</tbody>
</table>

(Item #3c) Overlay Pavement: Finish pave with an average depth of 2" of Type III ½" bituminous 
concrete wearing course on the following streets and roads.

<table>
<thead>
<tr>
<th>Street Name</th>
<th>Length and Width Approximate</th>
<th>Tonnage Estimated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian Street (6+64-35+24)</td>
<td>2,860 LF x 24' AVG.</td>
<td>869</td>
</tr>
<tr>
<td>Estimated Total</td>
<td>Varies</td>
<td>869</td>
</tr>
</tbody>
</table>
(Item #4) Shim/Overlay Pavement: Shim/overlay with an average minimum depth as noted of Type III ½" bituminous concrete wearing course on the following streets/roads.

<table>
<thead>
<tr>
<th>Street Name</th>
<th>Length and Width Approximate</th>
<th>Tonnage Estimated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chandler Road (0+25-16+52)</td>
<td>1,627 LF x 22’ AVG.</td>
<td>340</td>
</tr>
<tr>
<td>Chandler Road (19+11-48+53)</td>
<td>2,942 LF x 22’ AVG.</td>
<td>614</td>
</tr>
<tr>
<td>Chandler Road (Misc. Pave.)</td>
<td>Varies</td>
<td>63</td>
</tr>
<tr>
<td>Christian Street (35+24-66+00)</td>
<td>3,076 LF x 24’ x 2” AVG.</td>
<td>934</td>
</tr>
<tr>
<td>Christian Street (MISCL. PAVE.)</td>
<td>VARIES</td>
<td>139</td>
</tr>
<tr>
<td>Dothan Road (0+40-34+50)</td>
<td>3,410 LF x 22’ AVG.</td>
<td>712</td>
</tr>
<tr>
<td>Dothan Road (55+00-67+50)</td>
<td>1,250 LF x 22’ AVG.</td>
<td>261</td>
</tr>
<tr>
<td>Grovner Street (0+00 – 4+90)</td>
<td>490 LF x 22’ x 1.5” AVG.</td>
<td>47</td>
</tr>
<tr>
<td>Grovner Street (MISCL. PAVE.)</td>
<td>VARIES</td>
<td>9</td>
</tr>
<tr>
<td>VA Cutoff Road (0+00 – 58+30)</td>
<td>5,830 LF x 24’ x 1.5” AVG.</td>
<td>1,328</td>
</tr>
<tr>
<td>Estimated Total</td>
<td>Varies</td>
<td>4,447</td>
</tr>
</tbody>
</table>

(Item #5) Gate Box Adjustment: After the road has been shimmed the gate valve boxes shall be brought up to ½" below the finished pavement grade. The Town will supply risers and any required covers to replace cracked or broken covers at no cost to the contractor.

<table>
<thead>
<tr>
<th>Structure Type</th>
<th>Location</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gate Box</td>
<td>Chandler Road</td>
<td>4</td>
</tr>
<tr>
<td>Gate Box</td>
<td>Christian Street</td>
<td>5</td>
</tr>
<tr>
<td>Gate Box</td>
<td>VA Cutoff Road</td>
<td>11</td>
</tr>
<tr>
<td>Estimated Total</td>
<td>N/A</td>
<td>20</td>
</tr>
</tbody>
</table>

(Item #6) Manhole Cover Adjustment: After the road has been shimmed the manhole frames and covers shall be brought up to ¼" below the finished pavement grade. This cost shall include up to 12" of brick/concrete riser work. Any cracked or broken frames and covers shall be replaced by the Town at no cost to the contractor.

<table>
<thead>
<tr>
<th>Structure Type</th>
<th>Location</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewer Manhole</td>
<td>Chandler Road</td>
<td>14</td>
</tr>
<tr>
<td>Sewer Manhole</td>
<td>Christian Street</td>
<td>14</td>
</tr>
<tr>
<td>Sewer Manhole</td>
<td>Grovner Street</td>
<td>2</td>
</tr>
<tr>
<td>Sewer Manhole</td>
<td>VA Cutoff Road</td>
<td>10</td>
</tr>
<tr>
<td>Estimated Total</td>
<td>N/A</td>
<td>40</td>
</tr>
</tbody>
</table>
(Item #7) Catch Basin Grate Adjustment: After the road has been shimmed the catch basin frame and grates shall be brought up to ¼" below the finished pavement grade. This cost shall include up to 12" of brick/concrete riser work. Any cracked or broken frames and grates shall be replaced by the Town at no cost to the contractor.

<table>
<thead>
<tr>
<th>Structure Type</th>
<th>Location</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catch Basin</td>
<td>Christian Street</td>
<td>2</td>
</tr>
<tr>
<td>Catch Basin</td>
<td>VA Cutoff Road</td>
<td>1</td>
</tr>
<tr>
<td>Estimated Total</td>
<td>N/A</td>
<td>3</td>
</tr>
</tbody>
</table>

(Item #8) Asphalt Adjustment: A LS (lump sum) cost of $1 has been used for this line item. This is to signify that the asphalt adjustment will be paid for the difference in asphalt prices as posted by the State of Vermont between the March 2020 posting and the date(s) of paving.

(Item #9) Density Pay factor: The Town at their discretion may complete cores on the top pavement. Payment will be based on the compaction results as paid by the rates listed in Table 406.14A in the project specifications.

(Item #10) Shoulder Gravel: This shall be included for all roads listed on the bid sheet having 1.5" or greater pavement thicknesses. The gravel shall be ¾" hardpack. Payment of Shoulder Gravel/Stone shall be the actual number of linear feet as jointly measured and accepted in the field by the Contractor and Contract Monitor. Shoulder gravel shall be at or ½" below the edge of the new pavement after compaction. The width shall be a minimum of 1 foot in width as measured in place unless otherwise noted below. Payment per linear foot includes gravel, hauling, placing, compaction, sweeping, traffic control and all else necessary to complete the item.

The streets and lengths are as follows:

<table>
<thead>
<tr>
<th>Street Name</th>
<th>Approximate Center Line Length</th>
<th>Estimated Total Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chandler Road</td>
<td>4,569 LF</td>
<td>9,138 LF</td>
</tr>
<tr>
<td>Christian Street</td>
<td>5,936 LF</td>
<td>11,872 LF</td>
</tr>
<tr>
<td>Dothan Road</td>
<td>7,460 LF</td>
<td>14,920 LF</td>
</tr>
<tr>
<td>Fowler Lane</td>
<td>565 LF</td>
<td>1,130 LF</td>
</tr>
<tr>
<td>Grovner Street</td>
<td>490 LF</td>
<td>980 LF</td>
</tr>
<tr>
<td>VA Cutoff Road</td>
<td>5,830 LF</td>
<td>11,660 LF</td>
</tr>
<tr>
<td>Estimated Total</td>
<td>Varies</td>
<td>49,700</td>
</tr>
</tbody>
</table>
(Item #11) Painted Center and Fogg Lines: This shall be included for all roads. The contractor shall provide (2) 4" wide white fog lines and (2) 4" wide yellow center lines consisting of fast dry waterborne traffic paint conforming to requirements of TT-P-1952 for a minimum paint application thickness of 15 mils wet.

The streets and lengths are as follows:

<table>
<thead>
<tr>
<th>Street Name</th>
<th>Approximate Center Line Length</th>
<th>Estimated Total Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chandler Road</td>
<td>4,569 LF</td>
<td>18,276 LF</td>
</tr>
<tr>
<td>Christian Street</td>
<td>5,936 LF</td>
<td>23,744 LF</td>
</tr>
<tr>
<td>Dothan Road</td>
<td>7,460 LF</td>
<td>29,840 LF</td>
</tr>
<tr>
<td>Fowler Lane</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Grovner Street</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>VA Cutoff Road</td>
<td>5,830 LF</td>
<td>23,320 LF</td>
</tr>
<tr>
<td><strong>Estimated Total</strong></td>
<td><strong>Varies</strong></td>
<td><strong>95,180 LF</strong></td>
</tr>
</tbody>
</table>

(Item #12) Payment & Performance Bond: The successful bidder shall provide a Payment & Performance Bond in the amount of one hundred percent (100%) of the Bid Price, executed between the Bidder, Owner and a Surety Company

(Item #13) Bid Bond: All bids must be submitted with a Bid Bond in the amount of five percent (5%) of the Bid Price executed between the Bidder and the Surety Company.

END OF SECTION
GENERAL INFORMATION TO BIDDERS

1. Contract Documents and Definitions
2. Proposal Format
3. Printed Form of Proposal
4. Omissions, Discrepancies, Questions, and Addenda
5. Postponement of Date for Presenting and Opening Proposals
6. Prices
7. Acceptance or Rejection of Proposals
8. Bidder’s Qualifications
9. Low Bidder and Acceptance of the Proposal
10. Execution of Contract and Damages for Failure to Execute
11. Specifications Format
12. Manufacturer’s Experience
13. Safety and Health Regulations
1. **CONTRACT DOCUMENTS AND DEFINITIONS**
   The Contract Documents that will form the Contract are as defined in the General Conditions. Bidders must examine each of the Contract Documents, visit the location of the work, and inform themselves of the difficulties attending the execution of the work prior to the submission of their Proposals. The Contractor shall give attention to the definitions included in the Contract Documents.

2. **PROPOSAL FORMAT**
   The Contract Documents request proposals for a combined project and for individual contracts with each community. The intent is to allow each community to evaluate the bids from two different perspectives and to make decisions in the best interest of each community.

3. **PRINTED FORM OF PROPOSAL**
   All Bids must be made upon the attached form of “Bid Proposal” and should give a unit price in figures and a total price for each item; and must be signed and acknowledged by the Bidder, in accordance with the directions in the Proposal.

4. **OMISSIONS, DISCREPANCIES, QUESTIONS, AND ADDENDA**
   Should a Bidder find discrepancies in or omissions from the Contract Documents or is in doubt as to their meaning, the Bidder should at once notify the Owner. In general, no answer will be given to the prospective Bidders in reply to an oral question if the question involves the equality or use of products or methods other than those specifically designated or described on the Drawings or in the Specifications. All information given to Bidders by means other than set forth in the Contract Documents is given informally and shall not be used as the basis of a claim-against the Owner.

   Omissions, discrepancies, and questions must be submitted in writing to the Owner at least five (5) working days before the date for receipt of bids. If a question involves the equality or use of products or methods not specifically designated or described on the Drawings or in the Specifications, it must be accompanied by Drawings, Specification, or other data in sufficient detail to enable the Owner to determine the equality or suitability of the product or method. In general, the Owner will neither approve nor disapprove particular products prior to the opening of the bids; such products will generally be considered only when offered by the Contractor for incorporation into the work after the award and signing of the Contract.

   The Owner will prepare Addenda to address all questions received and answers provided. At least three (3) days prior to the bid opening date and time, Addenda will be sent to each of Bidder who has taken out the Contract Documents.

5. **POSTPONEMENT OF DATE FOR PRESENTING AND OPENING PROPOSALS**
   The Owner reserves the right to postpone the date for presentation and opening of Proposals and will give notice of such postponement to each prospective Bidder.
6. **PRICES**
   In the event of discrepancies between the price totals quoted in the Proposal and the unit price figures, the unit price figures shall control. The price is to include the furnishing of all material, plant, equipment, tools, labor, and other facilities required for the completion of the work except as may be otherwise expressly provided in the Contract Documents. The Contractor shall prepare his prices for the Proposal based on the equipment named in the Specifications. After the award of the Contract, if the Contractor desires to use equipment or methods other than those specified or shown in these documents, the Contractor shall submit data to prove equality, submit reason for change, submit the amount of credit (if any) to the Contract Price, provide Owner documentation for any changes required to arrive at a decision as to the suitability of the substitution.

7. **ACCEPTANCE OR REJECTION OF PROPOSALS**
   The Owner reserves the right to reject any or all Proposals for any reason, or to accept any Bid which it deems to be in its best interest. Any Proposal, which is incomplete, obscure, or irregular, may be rejected; any Proposal having erasures or corrections in the price sheet may be rejected; any Proposal, which omits a bid on any one or more items, may be rejected; and any Proposal accompanied by an insufficient or irregular certified check or Bid Bond may be rejected. The use of unbalanced bids is prohibited.

If the Bidder submits a Proposal before the deadline time for submission, the Bidder may, in writing, modify his original Proposal for submission. No oral, telephone, or telegraph modifications will be considered.

8. **BIDDER'S QUALIFICATIONS**
   It is the purpose of the Owner not to award this Contract to any Bidder who does not furnish evidence satisfactory to the Owner that the Bidder has the ability, skill, integrity and experience in this class of work and has sufficient capital and plant to enable the successful and complete execution of this contract within the specified time.

   In determining the skill, ability, and integrity of the responsible and eligible Bidders the following elements will be considered: Whether the Bidder has (a) previously defaulted on, failed to perform properly, or failed to complete on time contracts of similar nature; (b) habitually and without just cause neglected payment for material or to employees; (c) a permanent place of business; (d) adequate plant and equipment to do the Work properly; (e) a suitable financial status to meet the obligations incident to the Work; (f) appropriate technical experience; (g) labor force that can work in harmony with all other elements of labor employed; (h) sufficient bonding capacity; and, (i) adequate superintendence.

   To be considered Qualified BIDDER shall meet all of the following requirements:

   A. **BIDDER** shall not have defaulted nor turned the work over to a bonding company on any contract within the five prior years prior to the bid date.
B. BIDDER shall have completed a minimum of 5 projects with a minimum of 10,000 tons of paving.
C. BIDDER shall maintain a permanent place of business.
D. BIDDER shall not habitually and without just cause neglected payment for material or to employees.
E. BIDDER shall have adequate plant and equipment to do the Work properly without Subcontracting more than 35% of the value of the Project Work.
F. BIDDER shall have sufficient bonding capacity to the level of the Engineers Estimate.
G. BIDDER’S Superintend shall have a minimum of 5 years of experience in projects of a similar scale.

9. **LOW BIDDER AND ACCEPTANCE OF THE PROPOSAL**
   Except where the Owner exercised its right to reject any or all Proposals, the Contract will be awarded to the lowest responsible and qualified Bidder(s).

Within ninety (90) days after opening the Proposals the Owner will prepare a Notice of Intent to Award signed by a duly authorized representative of the Owner. This Notice of Intent to Award shall bind the successful Bidder to execute the Contract approval.

Notice of Approval and formal acceptance of the Proposal will be made in writing to the successful Bidder. A duly authorized representative of the Owner will sign the Notice of Approval.

The rights and obligations provided for in the Contract shall become effective and binding upon the Parties only with its formal execution by the Owner.

10. **EXECUTION OF CONTRACT AND DAMAGES FOR FAILURE TO EXECUTE**
    Any Bidder who’s Proposal shall be accepted will be required to execute the Contract within five (5) days after notice that the Contract has been awarded to him. Failure or neglect to do so shall constitute a breach of the agreement affected by the acceptance of the Proposal.

The damages to the Owner for such a breach shall include loss from the interference with his construction program and other items. The amount of the certified check or Bid Bond accompanying the Proposal of such Bidder will be retained by the Owner as liquidated damages for such breach. In the event any Bidder whose Proposal shall be accepted shall fail or refuse to execute the Contract herein before provided, the Owner may, at his option, determine that such Bidder has abandoned the Contract and thereupon his Proposal and the acceptance thereof shall be null and void and the Owner will be entitled to liquidated damages as above provided.

11. **SPECIFICATIONS FORMAT**
    The Specifications are generally in the format of the Construction Specifications Institute, Inc. (CSI.net.org).
12. **MANUFACTURER'S EXPERIENCE**
Wherever it may be written that an equipment manufacturer must have a specified period of experience with his product, equipment which does not meet the specified experience period may be considered if the equipment supplier or manufacturer is willing to provide a bond or cash deposit for the duration of the specified time period which will guarantee replacement of the equipment in the event of failure.

13. **SAFETY AND HEALTH REGULATIONS**
This project is subject to all of the Safety and Health Regulations (29 CRF Part 1926 and all subsequent amendments) as promulgated by the U.S. Department of Labor on June 24, 1974. Contractors are urged to become familiar with the requirements of these regulations.

14. **U.S.D.O.T. COMPLIANCE**
The Contractor shall be in compliance with the U.S. Department of Transportation's Federal Motor Carrier Safety Regulations, Parts 49CFR382 and 49CFR383. The Contractor shall maintain compliance with those regulations from date of contract award to project completion.

END OF SECTION
## Bid Schedule A

Name of Contractor: ______________________________

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Total Cost</th>
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<td>1a</td>
<td>Reclaim Method B (8&quot; thickness below pavement)</td>
<td>967</td>
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<td>Manhole Cover Adjustment</td>
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<td>LS</td>
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<td>Bid Bond</td>
<td>1</td>
<td>LS</td>
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</table>

**SUBTOTAL** $ __________

**NOTE:** Refer to the attached description of items for further detail of pay items.

LS=Lump Sum, LF=Linear Foot, EA=Each, SF=Square Foot, SY=Square Yard, CY=Cubic Yard, LU=Lump Unit, TON=English tons, HR=Hour

End Section
BID PROPOSAL

Proposal of

(Hereinafter called "BIDDER"), organized and existing under the laws of the State of

Doing business as

Corporation, Partnership, or an Individual

To the Town of Hartford (hereinafter called "OWNER").

In compliance with your Advertisement for Bids, BIDDER hereby proposes to perform all WORK for the Summer 2023 Pavement Management Projects in strict accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

By submission of this BID, each BIDDER certifies, and in the case of a joint BID each party thereto certifies as to his own organization, that this BID has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this BID with any other BIDDER or with any competitor.

BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the NOTICE TO PROCEED and fully complete within NINETY (90) consecutive calendar days thereafter. BIDDER further agrees to pay as liquidated damages, the sum of $500.00 for each consecutive calendar day thereafter as provided in Article 18 of the General Conditions.

BIDDER ACKNOWLEDGES RECEIPT OF THE FOLLOWING ADDENDA:

BIDDER agrees to perform all WORK described in the CONTRACT DOCUMENTS for the following lump sum and/or unit prices.
BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned

__________________________________________________________
as Principal, and

__________________________________________________________
as Surety, are hereby held and firmly bound unto The Town of Hartford, Vermont as OWNER in the
penal sum of ____________________________________________ for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors and assigns.

Signed, this _____________ day of _____________, 2023.

The Condition of the above obligation is such that whereas the principal has submitted to The Town of Hartford, Vermont a certain BID attached hereto and hereby made a part hereof to enter into a contract in writing, for the Summer 2023 Paving / Reclamation Projects.

NOW, THEREFORE,

(a) If said BID shall be rejected, or

(b) If said BID shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attachment hereto (properly completed in accordance with said BID) and shall furnish a BOND for faithful performance of said contract, and for the payment of all persons performing labor furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said BID, then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.
IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

__________________________________________ (L.S.)
Principal

__________________________________________
Surety
By:_____________________________________

IMPORTANT - Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570) and be authorized to transact business in the state where the project is located.
STATEMENT OF BIDDER’S QUALIFICATIONS

Complete the following questions relative to bidder’s qualifications. All questions must be answered, and the data given must be clear and comprehensive. This form must be notarized. If necessary, add separate sheets.

1. Name of Bidder:

2. Permanent Main Office Address:

3. When Incorporated:

4. Where Incorporated:

5. How many years have you been engaged in the contracting business under your present firm name?

6. Contracts on hand: (Attach list showing project title, project location, gross amount of each contract and the approximate anticipated dates of completion.)

7. General character of work performed by your company.
8. Have you ever failed to complete work awarded to you? YES NO
   If yes, where when and why?

9. Have you ever defaulted on a contract? YES NO
   If so, where when and why?

10. List the more important projects recently done by your company, stating approximate cost or each, the month/year completed, primary Owners contact/telephone number.

11. List your major equipment AVAILABLE FOR THIS CONTRACT. (Attach equipment schedule if necessary.)

12. Experience in construction work similar in importance to this project.

13. With what banks do you do business? Do you grant the OWNER permission to contact this (these) institutions? YES NO

14. If your answer to Number 13 is NO, please explain why.
NAME OF BIDDER

BY: ____________________________

Signature

_______________________________
Name

_______________________________
Title

STATE OF

) ) SS.
COUNTY OF

I, ________________________________, a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY that ________________________, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person, and acknowledged that they signed, sealed and delivered the said instrument as their free and voluntary act, for the uses and purposes therein set forth.

GIVEN under my hand and Seal this ______ day of ____________, 2023.

Notary Public

My Commission Expires
NOTICE OF AWARD

To:

PROJECT Description: 2023 Summer Paving / Reclamation Projects.

The OWNER has considered the BID submitted by you for the above described WORK in response to its Advertisement for Bids dated April 14th, 2023, and Information for Bidders.

You are hereby notified that your BID has been accepted for items in the amount of $ .

You are required by the Information for Bidders to execute the Agreement and furnish the required CONTRACTOR’s Performance BOND, Payment BOND and certificates of insurance within five (5) calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said BONDS within five (5) days from the date of this Notice, said OWNER will be entitled to consider all your rights arising out of the OWNER’s acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER.

By ____________________________

Title: Public Works Director

Dated this _____ day of ____________, 2023
ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged.

By: __________________________________________________________

this the _____________________ day of ______________________, 2023.

By: __________________________________________________________

Title: ________________________________________________________
AGREEMENT

THIS AGREEMENT, made this _____ day of __________, 2023 by and between the Town of Hartford, VT, hereinafter called "OWNER" and ____________________________ doing business as a corporation hereinafter called "CONTRACTOR".

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The CONTRACTOR will commence and complete the Summer 2023 Paving / Reclamation Projects, hereafter called the PROJECT, as shown in the Notice to Proceed and as specified herein.

2. The CONTRACTOR will furnish all the material, supplies, tools, equipment, labor and other services necessary for the construction and completion of the PROJECT described herein.

3. The CONTRACTOR will commence the work required by the CONTRACT DOCUMENTS within 5 (five) calendar days after the date of the NOTICE TO PROCEED and will complete the same within Ninety (90) Days unless the period for completion is extended otherwise by the CONTRACT DOCUMENTS. The CONTRACTOR agrees to pay as liquidated damages the sum of $500.00 for each consecutive calendar day thereafter as provided in Section 18 of the GENERAL CONDITIONS.

4. The CONTRACTOR agrees to perform all the WORK described in the CONTRACT DOCUMENTS and comply with the terms therein for a sum not to exceed the sum of $403,133.05 or as shown in the BID schedule.

5. The term "CONTRACT DOCUMENTS" means all documents contained in the Summer 2023 Paving / Reclamation Projects dated April 14th, 2023 and the following addenda:

6. The OWNER will pay to the CONTRACTOR in the manner and at such times as set forth in the Contract Documents in such amounts as required by the CONTRACT DOCUMENTS.

7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.
IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in two (2) copies, each of which shall be deemed an original on the agreement date first above written.

FOR THE TOWN OF HARTFORD

Witness:

By: ____________________
   Signature
   ____________________
   Print

Title: ____________________

Owner:

By: ____________________
   Signature
   ____________________
   Print

Title: ____________________

FOR THE CONTRACTOR

Witness:

By: ____________________
   Signature
   ____________________
   Print

Title: ____________________

Owner:

By: ____________________
   Signature
   ____________________
   Print

Title: ____________________
PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that ___________________________ (Name of Contractor)

______________________________ (Address of Contractor)

a ______________________________, hereinafter called Principal (Corporation, Partnership, or Individual)

and

______________________________ (Name of Surety)

______________________________ (Address of Surety)

hereinafter called Surety, are held and firmly bound unto the Town of Hartford, Vermont, 173 Airport Road, White River Junction, VT 05001 hereinafter called OWNER, in the penal sum of ____________________________ Dollars, $(____________)

in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the _____________ day of ________ 2023, a copy of which is hereto attached and made a part hereof for the Summer 2023 Paving / Reclamation Projects.

NOW, THEREFORE, if the Principal shall promptly make payment to any persons, firms, SUBCONTRACTORS, and corporations having any claim for labor performed or furnished, for equipment hired, including trucks, for material used and for fuels, lubricants, power, tools, hardware and supplies purchased by the Principal and used in carrying out the contract, and for labor and parts furnished upon the order of the Principal for the repair of equipment used in carrying out the contract, in accordance with the provisions of and satisfy all claims and demands incurred under such contract, then this obligation shall be void; otherwise to remain in full force and effect.
PROVIDED, FURTHER, that the notice required under this BOND to obtain benefits under this obligation by any person, firm, or corporation having any claim for labor performed, materials, machinery, tools, equipment, or supplies, shall extend for a period of ninety (90) days after completion and acceptance of the work as provided in said contract with the OWNER. Such notice shall consist of a statement of the claim and must be filed in the office of the Clerk of the Superior Court of the County within which the contract shall be principally performed. The Clerk of the Superior Court is required to send a copy of the statement of claim by mail to the Principal and Surety hereunder. Any person, firm, or corporation shall within one (1) year after filing such claim file a petition in the Superior Court for the County within which the contract shall be principally performed to enforce the claim in accordance with the provisions and requirements.

PROVIDED, FURTHER, that the said Surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the Principal shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in ________ counterparts (number) each one of which shall be deemed an original, dated this the ________ day of __________________ 2023.

ATTEST:

__________________________________________
(Principal)

__________________________________________
(Principal Secretary)

__________________________________________
(SEAL)

By: ________________________________________
(Name and Title)

__________________________________________
(Address)

__________________________________________
(Witness as to Principal)

__________________________________________
(Address)
(Surety)

By: _____________________________

(Assignee) (Attorney-in-fact)

ATTEST: __________________________

(Witness as to Surety)

______________________________

(Address)

NOTE: Date of BOND must not be prior to date of Contract. If Principal is a Partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the PROJECT is located.
PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

______________________________
(Name of Contractor)

______________________________
(Address of Contractor)

a ____________________________, hereinafter called Principal
(Corporation, Partnership, or individual)

And

______________________________
(Name of Surety)

______________________________
(Address of Surety)

hereinafter called Surety, are held and firmly bound unto the Town of Hartford, Vermont; 173 Airport Road, White River Junction, VT 05001 hereinafter called OWNER, in the penal sum of ____________ Dollars, $(__________)
in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the______ day of_______ 2023, a copy of which is hereto attached and made a part hereof for the construction of Summer 2023 Paving / Reclamation Projects.

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the Surety and during the one guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.
Provided, further, that the said surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

Provided, further, that no final settlement between the owner and the principal shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

In witness whereof, this instrument is executed in _______________ counterparts.

(number)

Each one of which shall be deemed an original, this the __________ day of __________ 2023.

Attest:

__________________________
(Principal)

__________________________
(Principal Secretary)

__________________________
(Principal Secretary)

By: ________________________

(Seal)

__________________________
(Address)

__________________________
(Witness as to principal)

__________________________
(Address)

__________________________
(Surety)

By: ________________________

(Atorney-in-fact)

__________________________
(Attest)
NOTE: Date of BOND must not be prior to date of Contract. If Principal is a Partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the PROJECT is located.
NOTICE TO PROCEED

To:

Date: _____________, 2023

Project: 2023 Summer Paving / Reclamation Projects

You are hereby notified to commence WORK in accordance with the Agreement dated, _____________, 2023, and you are to fully complete the WORK within NINETY (90) consecutive calendar days thereafter. Therefore, the date of completion of all WORK is _____________, 2023.

The Contract provides for an assessment of the sum of $500 as liquidated damages for each consecutive calendar day after the established Contract completion date that the WORK remains incomplete.

For Town of Hartford (Owner)

By ____________________________
Director of Public Works

Contractor Acceptance of Notice

Receipt of the above NOTICE TO PROCEED is hereby granted on this the____ day of _____________ 2023.

By: ____________________________
Owner

Title: ___________________________
CERTIFICATION OF SUBSTANTIAL COMPLETION

OWNER's Project No. 2023-H3

Project  Summer 2023 Paving / Reclamation Projects

CONTRACTOR

Contract For  Paving / Reclamation  Contract Due

This Certificate of Substantial Completion applies to all Work under the Contract Documents or to the following specified parts thereof:

To

OWNER

And to

CONTRACTOR

The Work to which this Certificate applies has been inspected by authorized representatives of OWNER and CONTRACTOR, and that Work is hereby declared to be substantially complete in accordance with the Contract Documents on

DATE OF SUBSTANTIAL COMPLETION

A tentative list of items to be completed or corrected is attached hereto. This list may not be all-inclusive, and the failure to include an item in it does not alter the responsibility of CONTRACTOR to complete all the Work in accordance with the Contract Documents. The items in the tentative list shall be completed or corrected by CONTRACTOR within _____ days of the above date of Substantial Completion.

* Correct all other items as necessity dictates.
** List of items to be completed or corrected.
The responsibilities between OWNER and CONTRACTOR for security, operation, safety, maintenance, heat, utilities, insurance, and warranties shall be as follows:

RESPONSIBILITIES

OWNER:

CONTRACTOR:

The following documents are attached to and made a part of this Certificate:

This certificate does not constitute an acceptance of Work not in accordance with the Contract Documents nor is it a release of CONTRACTOR's obligation to complete the Work in accordance with the Contract Documents.

OWNER accepts this Certificate of Substantial Completion on ________________ 2023

5

Gate Box Adjustment 20

By

CONTRACTOR accepts this Certificate of Substantial Completion on ________________ 2023

By

End of Section
CHANGE ORDER

PROJECT: No.

OWNER:
OWNER's Project No. 2023-H3

CONTRACTOR:
CONTRACTOR's Project No.

CONTRACT FOR:

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

Description:

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<tr>
<th>CHANGE IN CONTRACT TIME:</th>
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</thead>
<tbody>
<tr>
<td>Original Contract Price</td>
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</tr>
<tr>
<td>Original Contract Time</td>
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<td>Net (INCREASE) (DECREASE) of this Change Order</td>
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</tr>
<tr>
<td>Net (INCREASE) (DECREASE) of this Change Order</td>
<td></td>
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<tr>
<td>$</td>
<td></td>
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<tr>
<td>Contract Price with all approved Change Orders</td>
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</tr>
<tr>
<td>Contract Time with all approved Change Orders</td>
<td></td>
</tr>
<tr>
<td>$</td>
<td></td>
</tr>
</tbody>
</table>

RECOMMENDED:   APPROVED:   APPROVED:

By..................................   By..................................   By..................................

Hartford - Owner
GENERAL CONDITIONS

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1. Contract and Contract Documents

The Plans shall form part of this contract and the provisions thereof shall be as binding upon the parties hereto as if they were herein fully set forth. The table of contents, titles, headings, running headlines and marginal notes contained herein and in said documents is solely to facilitate reference to various provisions of the Contract Documents and in no way affect, limit or cast light on the interpretation of the provisions to which they refer.

2. Definitions

2.1 Addenda - Written or graphic instruments which modify or interpret the Contract Documents, Drawings and Specifications, by additions, deletions, clarifications or corrections.

2.2 Change Order - A written order to the Contractor authorizing an addition, deletion or revision in the Work within the general scope of the Contract Documents.

2.3 Contract Documents - The contract, including General Conditions, Supplemental General Conditions, Change Order, Plans, Specifications, and Addenda.

2.4 Contractor - The person, firm or corporation which shall perform the Work.

2.5 Owner - The person, firm or corporation named as such in the Contract Documents.

2.6 Owner - A public or quasi-public body or authority, corporation, association, partnership, or individual for whom the Work is to be performed.

2.7 Plans - The Contract Drawings, or exact reproductions thereof, which show the scope, character, dimensions and details of the work and which have been prepared or approved by the Owner.

2.8 Specifications - A part of the Contract Documents consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards and workmanship.

2.9 Special Conditions - Revisions or additions to these General Conditions or Specifications applicable to an individual project.

2.10 Supplemental General Conditions - Additions or modifications to these General Conditions supplying detailed information required for the project documents.

2.11 Work - All labor necessary to produce the construction required by the Contract Documents, and all materials and equipment incorporated or to be incorporated in the Project.

3. Additional Instructions and Detail Drawings

The Contractor will be furnished additional instructions and detail drawings as necessary to carry out the work included in the contract. The additional drawings and instructions thus supplied to the Contractor will coordinate with the Contract Documents and will be so prepared that they can be reasonably interpreted as part thereof. The Contractor shall carry out the work in accordance with the additional detail drawings and instructions. The Contractor and the Owner will prepare jointly (a) a
schedule, fixing the dates at which special detail drawings will be required, such drawings, if any, to be furnished by the Owner in accordance with said schedule, and (b) a schedule fixing the respective dates for the submission of shop drawings, the beginning of manufacture, testing and installation of materials, supplies and equipment, and the completion of the various parts of the work; each such schedule to be subject to change from time to time in accordance with the progress of the work.

4. Shop or Setting Drawings

4.1 The Contractor shall furnish six (6) copies of the manufacturer's shop drawings, specific design data as required in the detailed specifications, and technical literature covering all equipment and fabricated materials which the Contractor proposes to furnish under this Contract in sufficient detail to indicate full compliance with the specifications. Shop drawings shall indicate the method of installing, the exact layout dimensions of the equipment or materials, including the location, size and details of valves, pipe connections, etc.

4.2 The distribution of the six (6) copies of the approved drawings shall be three (3) copies to the Contractor, three (3) copies to the Owner.

4.3 No equipment or materials shall be shipped until the manufacturer's shop drawings and specifications or other identifying data, assuring compliance with these specifications, are approved by the Owner.

4.4 The Contractor shall check and verify all field measurements and shall be responsible for the prompt submission of all shop and working drawings so that there shall be no delay in the work.

4.5 Regardless of corrections made in or approval given to such drawings by the Owner, the Contractor will nevertheless be responsible for the accuracy of such drawings and for their conformity to the Plans and Specifications. The Contractor shall notify the Owner in writing of any deviations at the time the Contractor furnished such drawings. The Contractor shall remain responsible for the accuracy of the drawings showing the deviations but not for the acceptance of the deviations from the original design shown in the plans and specifications.

Approval by the Owner, or the Owner of any deviation in material, workmanship or equipment proposed subsequent to approval of the shop drawings or design data, shall be requested in writing by the Contractor.

5. Materials, Services, Facilities and Workmanship

5.1 Except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, 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.

5.2 New Materials
Unless otherwise specifically provided for in Divisions 1-16 of the Specifications, all workmanship, equipment materials and articles incorporated in the work shall be new and the best grade of the respective kinds for the purpose.

5.3 Equipment

The Contractor shall furnish to the Owner for approval the manufacturer's detailed specifications for all machinery, mechanical and other special equipment, which the Contractor contemplates installing together with full information as to type, performance characteristics, and all other pertinent information as required.

5.4 Materials

Materials specified by reference to the number or symbol of a specific standard, such as an A.S.T.M. Standard, AWWA Standard, a Federal Specification or other similar standard, shall comply with requirements in the latest revision thereof and any amendment or supplement thereto.

5.5 Certification

For equipment or for materials, when requested by the Owner, the Contractor shall submit Certificates of Compliance, from the manufacturer, certifying that the equipment or the materials comply with the requirements of the specifications or the standards. Such certification shall be in the following general form:
MANUFACTURER'S LETTERHEAD
CERTIFICATE OF COMPLIANCE
(Manufactured or Fabricated Material)

Date

WE HEREBY CERTIFY that

(Description, Kind of Material, Model #, etc.)

Furnished to

(Name of Contractor) (Prime or Sub.)

For Use on

(Project Name)

No. Owner

In the Amount of

(Quantity Represented)

Identified By

(Label, Marking, Seal No., Consignment, or Waybill No.)

Shipped on _____________ , Delivered on _____________

Shipped Via

(Method of Shipment, Car No., Truck No.)

MEETS THE REQUIREMENTS OF THE PERTINENT PROJECT PLANS, SPECIAL CONDITIONS AND SPECIFICATIONS OF THE SUBJECT PROJECT IN ALL RESPECTS. PROCESSING, PRODUCT TESTING AND INSPECTION CONTROL OF RAW MATERIALS ARE IN CONFORMANCE WITH ALL APPLICABLE SPECIFICATIONS, DRAWINGS AND/OR STANDARDS OF ALL ARTICLES FURNISHED.

All records and documents pertinent to this certificate and not submitted herewith will be maintained available by the undersigned for a period of not less than three years from the date of this certificate.

(Manufacturer)

Signed By

Title

6. Contractor's Warranty of Title to Materials
No material, supplies, or equipment to be installed or furnished under this contract shall be purchased subject to any chattel mortgage or under a conditional sale, lease purchase or other agreement by which an interest therein or in any part thereof is retained by the seller or supplier. The Contractor shall warrant good title to all materials, supplies, and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed thereon by him to the Owner free from any claims, liens, or charges. Neither the Contractor nor any person, firm or corporation furnishing any material or labor for any work covered by this Contract shall have any right to a lien upon any improvement or appurtenance thereon. Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any bond given by the Contractor for their protection or any rights under any law permitting such persons to look to funds due the Contractor in the hands of the Owner. The provisions of this paragraph shall be inserted in all subcontracts and material contracts and notice of its provisions shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

7. Inspection and Testing of Materials

7.1 All materials and equipment used in the construction of the project shall be subject to inspection and testing by the Owner in accordance with accepted standards at any and all times during manufacture or during the project construction and at any or all places where such manufacture is carried on.

7.2 The Contractor shall furnish promptly, upon a timely request by the Owner, all materials required to be tested. All tests made by the Owner will be performed in such manner and sufficiently ahead of scheduled installation, as not to delay the work of the Contractor unnecessarily. When required, testing of concrete, masonry, soils, pipe and pipe materials will be made in accordance with provisions in the appropriate part of the Specifications.

7.3 Material required to be tested which is delivered to the job site shall not be incorporated into the work until the tests have been completed and approval or acceptance is given in writing by the Owner.

7.4 Each sample submitted by the Contractor shall carry an identification label containing such information as is requested by the Owner. It shall also include a statement that the samples are representative of the remaining materials to be used on the project.

7.5 Approval of any materials shall be general only and shall not constitute a waiver of the Owner's right to demand full compliance with the contract requirements.

7.6 The Owner may, at his own discretion, undertake the inspection of materials at the source. In the event plant inspection is undertaken, the following conditions shall be met:

a) The Owner shall have the cooperation and assistance of the Contractor and the producer with whom the Contractor has contracted for materials.

b) The Owner shall have full entry at all reasonable times to such parts of the plant as may concern the manufacture or production of the materials being furnished.

c) Adequate safety measures shall be provided and maintained at all times.
7.7 Except as otherwise specifically stated in the contract, the costs of sampling and testing will be divided as follows:

a) The Contractor shall furnish the Owner, without extra cost, all samples required for testing purposes. All sampling and testing including the number and selection of samples will be decided by the Owner for his own information and use.

b) When testing of materials is specified in the appropriate section of the Specifications, the costs of same will be charged to and defrayed by the Owner as part of his fee, unless otherwise stated in the appropriate section of the Specifications. However, costs of equipment performance tests shall be borne by the Contractor, as detailed in the appropriate section of the Specifications.

c) When the Contractor proposes an item as equal to the item or items specified, reasonable tests may, or may not be required by the Owner. If the Owner requires tests of a proposed equal item, the Contractor will be required to assume all costs of such testing.

d) Normally, any item that fails to pass tests required by the Owner or by the Specifications will be rejected and shall be removed from the project site. However, if, upon request of the Contractor, retesting or further tests are permitted by the Owner, the Contractor shall assume all costs related to such re-testing or further tests.

e) Neither the Owner nor the Owner will in any way be charged for the manufacturer's costs in supplying certificates of compliance.

8. "Or Equal" Clause, Substitutions, and Contractor's Options

8.1 Whenever a material, article, or piece of equipment is identified on the plans or in the specifications by reference to manufacturer's or vendor's names, trade names, catalogue numbers, etc., it is intended merely to establish a standard. Any material, article, or equipment of other manufacturers and vendors, which will perform satisfactorily the duties imposed by the general design, will be considered equally acceptable provided the material, article, or equipment so proposed is, in the opinion of the Owner, of equal quality and function. The Owner will determine equality based on such information, tests, or other supporting data they may require of the Contractor.

8.2 Furthermore, upon acceptance and approval by the Owner of an equal product, it shall remain the responsibility of the Contractor to coordinate installation of the item with all other items to be furnished to assure proper fitting together of all items. Similar responsibility applies to items that are left to the Contractor's option. Any additional cost of equal items and any additional cost incidental to the coordination and/or fitting together of such items shall be borne by the Contractor at no extra cost to the Owner.

8.3 In the event that a specified or equal item is not available, or that delivery time is so long as to result in delays which are unacceptable to the Owner, the Contractor may propose a substitute item of less than equal performance and quality. If this substitute is acceptable to
the Owner, any difference in purchase cost or costs incidental to the installation of such an item will be negotiated between the parties.

Neither equal nor substitute items shall be installed without written approval of the Owner.

9. Patents

9.1 The Contractor shall hold and save the Owner and their officers, agents, 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 appliance manufactured or used in the performance of the contract, including its use by the Owner, unless otherwise specifically stipulated in the Contract Documents.

9.2 License or Royalty Fees

License and/or Royalty Fees for the use of a process in the design of the project which is authorized by the Owner of the project must be reasonable, and paid to the holder of the patent, or his authorized licensee, direct by the Owner and not by or through the Contractor.

9.3 If the Contractor uses any design, device or materials in the construction methods for the project covered by letters, patent or copyright, the Contractor shall provide for such use by suitable agreement with the Owner of such patented or copyrighted design, device or material. It is mutually agreed and understood, that, without exception, the contract prices shall include all royalties or costs arising from the use of such design, device or materials, in any way involved in the work. The Contractor and/or his Sureties shall indemnify and save harmless the Owner of the project from any and all claims for infringement by reason of the use of such patented or copyrighted design, device or materials or any trademark or copyright in connection with work agreed to be performed under this contract, and shall indemnify the Owner for any cost, expense or damage which it may be obliged to pay by reason of such infringement at any time during the prosecution of the work or after completion of the work.

10. Surveys

10.1 Land and Property

The Owner will provide all land surveys and will establish and locate all property lines relating to the project.

10.2 Construction Surveys

For structures and roadways, the Owner will establish and stake out base lines as needed and will establish horizontal controls and bench marks in and around the project site for the use and convenience of the Contractor and for the Owner's own reference in checking the work in progress. For structures such as pipelines, the Owner will establish the location of the pipe, manholes and other appurtenances, and will establish bench marks along the route of the pipeline at convenient intervals for the use of the Contractor and for his own reference in checking the pipe and manhole invert and other elevations throughout the project.
The Contractor shall utilize the lines and bench marks established by the Owner to set up whatever specific detail controls the Contractor may need for establishing location, elevation lines and grades of all structures and roadways. All this work is subject to checking, approval, and continuous surveillance by the Owner to avoid error.

The Contractor shall provide the Owner with a qualified man or men to assist in this checking as needed and on request of the Owner.

10.3 Protection of Stakes

The Contractor shall protect and preserve all of the established baseline stakes, bench marks, or other controls placed by the Owner. Any of these items destroyed or lost through fault of the Contractor will be replaced by the Owner at the Contractor's expense.

11. Contractor's Obligations

The Contractor shall and will, in good workmanlike manner, do and perform all work and furnish and pay for all supplies and materials, machinery, equipment, facilities and means, except as herein otherwise expressly specified, necessary or proper to perform and complete all the work required by this Contract, and any and all supplemental plans and drawings, in accordance with the directions of the Owner as given from time to time during the progress of the work, whether or not the Contractor considers the direction in accordance with the terms of the Contract. The Contractor shall furnish, erect, maintain and remove such construction plant and such temporary works as may be required. The Contractor shall observe, comply with, and be subject to all terms, conditions, requirements, and limitations of the Contract Documents, and shall do, carry on and complete the entire work to the satisfaction of the Owner and the Owner.

12. Weather Conditions

In the event of temporary suspension of work, or during inclement weather, or whenever the Owner shall direct; the Contractor will, and will cause his subcontractors to protect carefully his and their work and materials against damage or injury from the weather. If, in the opinion of the Owner, any work or material shall have been damaged or injured by reason of failure on the part of the Contractor or any of his subcontractors to so protect his work, such materials shall be removed and replaced at the expense of the Contractor.

13. Protection of Work and Property - Emergency

13.1 The Contractor shall at all times safely guard the Owner's property from injury or loss in connection with this Contract. He shall at all times safely guard and protect his own work, and that of adjacent property, from damage. The Contractor shall replace or make good any such damage, loss or injury unless such is caused directly by errors contained in the Contract, or by the Owner, or his duly authorized representatives.

13.2 The Contractor shall take all necessary precautions for the safety of employees on the work, and shall comply with all applicable provisions of Federal, State and Municipal safety laws and
building codes to prevent accidents or injury to persons on, about or adjacent to the premises where the work is being performed. He shall erect and properly maintain at all times, as required by the conditions and progress of the work, all necessary safeguards for the protection of workmen and the public and shall post danger signs warning against the hazards created by such features of construction as protruding nails, hcist, well holes, elevator hatchways, scaffolding, window openings, stairways, trenches and other excavations, and falling materials, and the Contractor shall designate a responsible member of his organization on the work, whose duty shall be the prevention of accidents. The name and position of any person so designated shall be reported to the Owner by the Contractor. The person so designated shall be available by phone during non-working hours.

13.3 In case of emergency that threatens loss or injury of property, and/or safety of life, the Contractor will be allowed to act, without previous instructions from the Owner, in a diligent manner. He shall notify the Owner immediately thereafter. Any claim for compensation by the Contractor due to such extra work shall be promptly submitted in writing to the Owner for approval.

13.4 When the Contractor has not taken action but has notified the Owner of an emergency threatening injury to persons or damage to the work or any adjoining property, the Contractor shall act as instructed or authorized by the Owner.

The intention is not to relieve the CONTRACTOR from acting, but to provide for consultations between OWNER and CONTRACTOR in an emergency that permits time for such consultations.

13.5 The amount of reimbursement claimed by the Contractor on account of any emergency action shall be determined in the manner provided in Article 17 (extra work and change orders) of the General Conditions.


14.1 Inspection

For purposes already specified and for any other purpose, the Owner and their agents and employees may enter upon the work and the premises used by the Contractor, and the Contractor shall provide safe and proper facilities therefor. The Owner shall be furnished with every reasonable facility for ascertaining that the work is in accordance with the requirements and intention of this contract, even to the extent of uncovering or taking down portions of finished work.

14.2 Conformance

During its progress and upon its completion, all work shall conform to the location, lines, levels, and grades indicated on the drawings or established on the site by the Owner and shall be built in a thoroughly substantial and workmanlike manner, in accordance with the drawings and specifications and the supplementary directions given from time to time by the Owner. In no case will any work in excess of the requirements of the drawings and specifications be paid for unless ordered in writing by the Owner.
14.3 Unauthorized Work

(a) Work not according to Plans and Specifications: work considered by the Owner to be outside of or different from the Plans and Specifications and done without instruction by the Owner, or in the wrong location, or done without proper lines or levels, may be ordered to be uncovered or dismantled.

(b) Work done in the absence of the Owner or his agent: similarly such work performed in the absence of the Owner or his agent, may be ordered to be uncovered or dismantled.

(c) Should the work thus exposed or examined prove satisfactory, the uncovering or dismantling and the replacement of material and rebuilding of the work shall be considered as "EXTRA WORK".

(d) Should the work thus exposed or examined prove to be unsatisfactory the uncovering or dismantling and the replacement of material and rebuilding of the work shall be at the expense of the Contractor.

15. Reports, Records, and Data

The Contractor shall submit to the Owner such schedule of quantities and costs, progress schedules, reports, estimates, records and other data as the Owner may request concerning work performed or to be performed under this contract.

16. Superintendence by Contractor

At the site of the work the Contractor shall employ a competent construction superintendent or foreman who shall have full authority to act for the Contractor. It is understood that such representative shall be acceptable to the Owner and shall be one who can be continued in that capacity for the particular job involved unless the superintendent / foreman ceases to be on the Contractor’s payroll.

17. Extra Work and Change Orders

17.1 The Owner may at any time by written order and without notice to the Sureties require the performance of such extra work or changes in the work as may be found necessary or desirable. The amount of compensation to be paid to the Contractor for any extra work so ordered shall be made in accordance with whichever of the following plans the Owner elects: (1) a price agreed upon between the parties and stipulated in the order for the extra work, or (2) a price determined by adding 15% to the "reasonable cost" of the extra work performed, such "reasonable cost" to be determined by the Owner in accordance with the following paragraph.

17.2 In arriving at the "reasonable cost" for the purposes of (2) above, the Owner shall include the reasonable cost to the Contractor of all materials used, of all labor, both common and skilled, of foreman, trucks, and the fair-market rental rate for all machinery and equipment for the period employed directly on the work. The reasonable cost for extra work shall include the cost to the Contractor of any additional insurance that may be required covering public liability.
for injury to persons and property, the cost of Workmen's Compensation Insurance, Federal
Social Security, and any other extra work shall not include any cost or rental of small tools,
builtings, or any portion of the time of the Contractor, his project supervisor or his
superintendent, as assessed upon the amount of extra work, these items being considered
covered by the fifteen percent (15%) added to the reasonable cost. Furthermore, in addition
to the fifteen percent (15%) compensation added to the "reasonable cost", the Contractor will
be entitled to the documented cost for the increase of the premium on the bond for the extra
work which is approved and authorized by the Owner.

17.3 In the case of extra work which is done by subcontractors, whether these are under the
specific contract items provided herein, or otherwise if so approved by the Owner, the fifteen
percent (15%) added to the reasonable cost of the work will be allowed only to the
subcontractor. On such work, an additional percentage of the reasonable cost (before
addition of the 15%) will be paid to the Contractor for his work in directing the operations of
the subcontractor, for administrative supervision, and for any overhead involved. Such
percentage shall be in accordance with the following schedule: Reasonable cost up to and
including $50,000 - 10%, $50,000 to and including $100,000 - 7 1/2%; greater than $100,000 -
5%.

17.4 The Owner may authorize minor changes or alterations in the work not involving extra cost
and not inconsistent with the overall intent of the Contract Documents. These may be
accomplished by a written Field Order. However, if the Contractor believes that any minor
change or alteration authorized by the Owner entitles him to an increase in the contract price,
the Contractor may make a claim therefore as provided in Article 21.

18. Time for Completion and Liquidated Damages

18.1 The Contractor agrees that said work shall be prosecuted regularly, diligently, and
uninterrupted at such rate of progress as will insure full completion thereof within the time
agreed upon. It is expressly understood and agreed, by the Contractor, that the time for the
completion of the work described herein is a reasonable time for the completion of the same,
taking into consideration the average climatic range and usual industrial conditions prevailing
in this locality.

18.2 If the said Contractor shall neglect, fail or refuse to complete the work within the time allowed,
or any proper extension thereof granted by the Owner, then the Contractor does hereby
agree, to pay to the Owner the amount agreed upon between the OWNER and the
CONTRACTOR specified in the contract, not as a penalty but as liquidated damages for such
breach of contract as hereinafter set forth, for each and every calendar day that the Contractor
shall be in default after the time stipulated in the contract for completing the work.

18.3 The said amount is fixed and agreed upon by and between the Contractor and the Owner
because of the impracticability and extreme difficulty of fixing and ascertaining the actual
damages the Owner would in such event sustain, and said amount is agreed to be the amount
of damages which the Owner would sustain for delays and Owners services during the delay
and said amount shall be retained from time to time by the Owner from current periodical
estimates.
18.4 It is further agreed that time is of the essence of each and every portion of this contract and of
the specifications wherein a definite and certain length of time is fixed for the performance of
any act whatsoever; and where under the Contract an additional time is allowed for the
completion of any work, the new time limit fixed by such extension shall be of the essence of
this contract. Provided, that the Contractor shall not be charged with liquidated damages or
any excess cost when the Owner determines that the Contractor is without fault and the
Contractor’s reasons for the time extension are acceptable to the Owner; Provided, further,
that the Contractor shall not be charged with liquidated damages or any excess cost when the
delay in completion of the work is due:

(a) To any preference, priority or allocation order duly issued by the Government;

(b) To unforeseeable cause beyond the control and without the fault or negligence of the
Contractor, including, but not restricted to, acts of God, or of the public enemy, acts of
the Owner, acts of another Contractor in the performance of a contract with the Owner,
fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and severe
weather;

(c) To any delays of subcontractors or suppliers occasioned by any of the causes
specified in subsections (a) and (b) of this article:

18.5 Provided, further, that the Contractor shall promptly notify the Owner in writing if the causes of
the delay, who shall ascertain the facts and extent of the delay, and notify the Contractor
within a reasonable time of their decision in the matter.

19. Defective Work

19.1 The Contractor shall promptly remove from the premises all materials and work condemned
by the Owner as failing to meet contract requirements, whether incorporated in the work or
not, and the Contractor shall promptly replace and re-execute his own work in accordance
with the contract and without expense to the Owner and shall bear the expense of making
good all work of other contractors destroyed or damaged by such removal or replacement.

19.2 All removal and replacement work shall be done at the Contractor’s expense. If the
Contractor does not take action to remove such condemned work and materials within 30
days after written notice, the Owner may remove them and store the material at the expense
of the Contractor. If the Contractor does not pay the expense of such removal and storage
within ten days thereafter, the Owner may, upon ten days written notice, sell such
materials at an auction or through private sale and shall pay to the Contractor any net
proceeds thereof, after deducting all the costs and expenses that should have been borne by
the Contractor.

20. Subsurface Conditions Found Different

Should the Contractor encounter subsurface and/or latent conditions at the site materially differing
from those shown on the Plans or indicated in the Specifications, the Contractor shall immediately
give notice in writing or if verbally, with confirmation in writing as soon as possible, to the Owner of
such conditions before they are disturbed. The Owner will thereupon promptly investigate the
conditions, and if the Owner finds that they materially differ from those shown on the Plans or
indicated in the Specifications, to the extent that changes in design are necessary or quantities differ considerably from those indicated in the plans and specifications, the Owner will at once make such changes as the Owner may find necessary. Any increase or decrease of cost resulting from such changes shall be adjusted in the manner provided in Article 17. (Extra Work and Change Orders).

21. Claims for Extra Cost

21.1 No claim for extra work or cost shall be allowed unless the same was done in pursuance of a written order of the Owner approved by the Owner as aforesaid, and the claim presented with the first estimate after the changed or extra work is done. When work is performed under the terms of Article 17, the Contractor shall furnish satisfactory bills, payrolls and vouchers covering all items of cost and when requested by the Owner, and give the Owner access to accounts relating thereto.

21.2 If the Contractor claims that any instructions by drawings or otherwise issued after the date of the Contract involve extra cost under the Contract, the Contractor shall give the Owner written notice thereof after the receipt of such instruction, but in any event before proceeding to execute the work, except an emergency situation endangering life or property, and the procedure shall then be as provided for under Article 17, "Extra Work & Change Orders". No such claim shall be valid unless so made.

22. Right of the Owner to Terminate Contract

22.1 In the event that any of the provisions of this contract are violated by the Contractor, or by any of his subcontractors, the Owner may serve written notice upon the Contractor and the Surety of its intention to terminate the contract. Such notices are to contain the reasons for such intentions to terminate the contract, and unless, within ten (10) days after the serving of such notice upon the Contractor, such violation or delay shall cease, and satisfactory arrangement for correction be made, the Contract shall, upon the expiration of said ten (10) days cease and terminate. In the event of any such termination, the Owner shall immediately serve notice thereof upon the Surety and the Contractor and the Surety shall have the right to take over and perform the contract; provided, however, that if the Surety does not commence performance thereof within ten (10) days from the date of the mailing to such Surety of notice of termination, the Owner may take over the work and prosecute the same to completion by contract or by force account for the account and at the expense of the Contractor and the Contractor and his Surety shall be liable to the Owner for any excess cost occasioned the Owner thereby, and in such event the Owner may take possession of and utilize in completing the work, such materials, appliances, and plant as may be on the site of the work and necessary therefor.

22.2 If the Contractor should be judged as bankrupt, or if the Contractor should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if the Contractor should persistently or repeatedly refuse or should fail, except in cases for which extensions or time are provided, to supply enough properly skilled workmen or materials, or if the Contractor should fail to make payments to subcontractors or for material or labor, so as to affect the progress of the work, or persistently be guilty of a substantial violation of the contract, then the Owner, upon the written notice of the Owner that sufficient cause exists to justify such action may, without prejudice to any other right or remedy and after giving the Contractor and his Surety seven days written notice, terminate the
employment of the Contractor and take possession of the premises and of all materials, tools, equipment and other facilities installed on the work and paid for by the Owner, and finish the work by whatever method deem expedient. In the case of termination of this contract before completion from any cause whatever, the Contractor, if notified to do so by the Owner, shall promptly remove any part or all of his equipment and supplies from the property of the Owner. The Owner shall have the right to remove such equipment and supplies at the expense of the Contractor. If such expense shall exceed such unpaid balance, the Contractor shall pay the difference to the Owner. The expense incurred by the Owner as herein provided, and the damage incurred through the Contractor's default, shall be certified by the Owner.

22.3 Where the contract has been terminated by the Owner, said termination shall not affect or terminate any of the rights of the Owner against the Contractor or his Surety then existing or which may thereafter accrue because of such default. Any retention or payment of monies by the Owner due the Contractor under the terms of the contract, shall not release the Contractor or his Surety from liability for his default.

23. Construction Schedule and Periodic Estimates

23.1 Before starting the work and from time to time during its progress, as the Owner may request, the Contractor shall submit to the Owner a written description of the methods the Contractor plans to use in doing the work and the various steps the Contractor intends to take.

23.2 The Contractor shall prepare and submit to the Owner (a) a written schedule fixing the dates at which additional drawings, if any, will be required and (b) a written schedule fixing the respective dates for the start and completion of various parts of the work. The submittal of these original schedules is stated in an appropriate section of the Specifications. Each such schedule shall be subject to review and change from time to time during the progress of the work.

24. Payments to the Contractor

24.1 Progress Payments

The Owner will, once a month and within forty-five (45) days of receipt of a certificate of payment from the Owner, make a progress payment to the Contractor on the basis of an estimate of the total amount of work done to the time of such estimate and the value thereof as prepared by the Contractor and approved by the Owner. The progress payment shall be on a form agreeable to both the OWNER and the CONTRACTOR.

24.2 Retainage by Owner

The Owner will retain an amount of the progress payment, each month, in accordance with the following procedures:

(a) Until construction is 50% complete, as determined by the Owner, retainage shall be 10% of the monthly payments claimed.
After construction is 50% complete, and provided the Contractor has performed to the satisfaction of the Owner, and provided further that there is no specific cause for greater retainage, no further monies will be withheld, and the retainage amount will remain at the same balance throughout the remainder of the project, unless drawn upon by the Owner in accordance with Articles 19 and 22.

Upon substantial or final completion (see Article 25, Acceptance and Payment) the amount of retainage will be reduced to 2% of the total amount due the Contractor plus an additional retainage based on the Owner’s estimate of the fair value of the punch list items and the cost of completing and/or correcting such items of work, with specified amounts for each incomplete or defective item of work. As these items are completed or corrected, they shall be paid for out of the retainage until the entire project is declared completed. The remaining balance, 2% of the total amount due the contractor, will be held for one year and released upon the expiration of the guaranty period. (See Article 25)

24.3 Payment for Materials

In reviewing monthly estimates of the value of work done, the Owner may accept in the estimate, prior to subtracting the retainage, the delivered cost of certain equipment and nonperishable material which has been delivered to the site and which is properly stored and protected from damage. With the estimate, the Contractor shall furnish the Owner receipted invoices as evidence that the material has been delivered to the site. Prior to submitting the next monthly estimate, the Contractor shall provide the Owner with paid invoices or other evidence that the materials have been paid for. If the Contractor fails to submit such evidence, the Owner may subtract the value of such materials or equipment, previously paid for by the Owner, from the next monthly estimate. The type of equipment and material eligible for payment prior to being incorporated in the work will be at the Owner’s discretion. In general, larger items of material and equipment, and material and equipment made specifically for the subject job, will be eligible for payment.

24.4 Care and Protection of Materials and Work

All material and work covered by partial payments made shall thereupon become the sole property of the Owner, but this provision shall not be construed as relieving the Contractor from the sole responsibility for the care and protection of 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 Owner to require the fulfillment of all of the terms of the contract.

24.5 Owner’s Right to Withhold Certain Amounts and Make Application Thereof

The Contractor agrees to indemnify and save the Owner harmless from all claims growing out of the lawful demands of subcontractors, laborers, workmen, mechanics, material providers, and furnishers of machinery and parts thereof, equipment, power tools and all supplies, including commissary, incurred in the furtherance of the performance of this contract. The Contractor shall, at the Owner’s request, furnish satisfactory evidence that all obligations of the nature hereinabove designated have been paid, discharged, or waived. If the Contractor fails so to do, then the Owner may, after having served written notice on the said Contractor...
either pay unpaid bills of which the Owner has written notice, direct, or withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged whereupon payment to the Contractor shall be resumed, in accordance with the terms of this Contract but in no event shall the provisions of this sentence be construed to impose any obligations upon the Owner to either the Contractor or his Surety. In paying any unpaid bills of the Contractor, the Owner shall be deemed the agent of the Contractor, and any payment so made by the Owner shall be considered as a payment made under the contract by the Owner to the Contractor and the Owner shall not be liable to the Contractor for any such payments made in good faith.

25. Acceptance and Payment

25.1 Substantial Completion and Payment Therefor

Substantial completion shall be that point at which the work has been completed to the extent that the Owner may occupy and make use of the project (or portion of the project) for which it was intended. Upon substantial completion there may be minor items, such as seeding, landscaping, etc., yet to be completed or items of work to be corrected.

Upon receipt of written notice from the Contractor that the work is substantially complete, the Owner will promptly make an inspection, and when the Owner finds the work acceptable under the terms of the contract and the contract substantially completed, the Owner will issue a dated certificate, and a punch list of all items to be completed or corrected, over his own signature, stating that the work required by this contract has been substantially completed and is accepted by him under the terms and conditions thereof. The entire balance due the Contractor less two percent (2%) retainage, and less a retention based on the Owner's estimate of the fair value of the punch list items and the cost of completing or correcting such items of work with specified amounts for each incomplete or defective item of work, will be due and payable. The Owner shall set a reasonable time limit to complete or correct the punch list items as part of the Substantial Completion Certificate.

The general guarantee period for the work substantially completed shall begin on the date certified by the Owner.

25.2 Final Completion and Payment Therefor

Final completion shall be that point at which all work on the project or portion of the project has been completed, all defective work has been corrected, and clean up has been accomplished. Unless a certificate of substantial completion has been issued, the general guarantee period shall begin upon certification by the Owner of final completion.

25.3 Final Acceptance

Following the termination of the general guarantee period for the entire project which has been certified completed or substantially completed, the Owner, may make a final inspection of all or portions of the project. When it is found that the work is still acceptable, and that no work has become defective under the terms of the contract, the Owner will accept the entire
project and make final payment, including therein any monies retained during the guarantee period.

25.4 If, however, the inspection discloses any work in whole or in part, as being unsatisfactory, the Owner will give the Contractor the necessary instructions for correction of such work and the Contractor shall immediately comply with and execute such instructions. Upon correction of the work, another inspection will be made which shall constitute the final inspection provided the work has been satisfactorily completed.

25.5 Before issuance of final payment, the Contractor, if required in the Special Conditions, shall certify in writing to the Owner that all payrolls, material bills, and other indebtedness connected with the work have been paid, or otherwise satisfied, except that in case of disputed indebtedness or liens, if the Contract does not include a payment bond, the Contractor may submit in lieu of certification of payment a surety bond in the amount of the disputed indebtedness or liens, guaranteeing payment of all such disputed amounts, including all related costs and interest in connection with said disputed indebtedness or liens which the Owner may be compelled to pay upon adjudication.

25.6 If after the work has been substantially completed, full completion thereof is materially delayed through no fault of the Contractor and the Owner so certifies, the Owner may, upon certificate of the Owner, and without terminating the Contract, make payment of the balance due for the portion of the work fully completed and accepted. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

25.7 The acceptance by the Contractor of final payment shall be and shall operate as a release to the Owner of all claims and all liability to the Contractor for all things done or furnished in connection with this work and for every act and neglect of the Owner and others relating to or arising out of this work. No payment, however, final or otherwise, shall operate to release the Contractor or his Sureties from any obligations under this contract of the Performance and Payment Bond.

26. Payments by Contractor

The Contractor shall pay (a) for all transportation and utility services not later than the 20th day of the calendar month following that in which services are rendered, (b) for all materials, tools, and other expendable equipment to the extent of 90% of the cost thereof, not later than the 20th day of the calendar month following that in which such materials, tools, and equipment are delivered at the site of the project, and the balance of the cost thereof not later than the 30th day following the completion of that part of the work in or on which such materials, tools, and equipment are incorporated or used, and (c) to each of his subcontractors, not later than the 5th day following each payment to the Contractor, the respective amounts allowed the Contractor on account of the work performed by his subcontractors to the extent of each subcontractor’s interest therein.

27. Insurance

The Contractor shall not commence work under this contract until the Contractor has obtained all the insurance required under this article and such insurance has been approved by the Owner, nor shall
the Contractor allow any subcontractor to commence work on his subcontract until the insurance required of the subcontractor has been so obtained and approved.

27.1 Compensation Insurance

The Contractor shall procure and shall maintain during the life of this contract Workmen's Compensation Insurance as required by applicable State law for all of his employees to be engaged in work at the site of the project under this contract and, in case of any such work, the Contractor shall require the subcontractor similarly to provide Workmen's Compensation Insurance for all of the latter's employees to be engaged in such work unless such employees are covered by the protection afforded by the Contractor's Workmen's Compensation Insurance. In case any class of employees engaged in hazardous work on the project under this contract is not protected under the Workmen's Compensation Statute, the Contractor shall provide and shall cause each subcontractor to provide adequate employer's liability insurance for the protection of his employees that are not otherwise protected.

27.2 Contractor's Public Liability and Property Damage Insurance and Vehicle Liability Insurance

The Contractor shall procure and shall maintain, during the life of this contract, Contractor's Public Damage Insurance and Vehicle Liability Insurance in the amounts specified in Article 27.8.

27.3 Subcontractor's Public Liability and Property Damage Insurance and Vehicle Liability Insurance

The Contractor shall either (1) require each of his subcontractors to procure and to maintain, during the life of his subcontract, Subcontractor's Public Liability and Property Damage Insurance and Vehicle Liability Insurance of the type and in the amounts specified in Article 27.8 or, (2) insure the activities of his subcontractors in his policy, specified in Article 27.2, by listing the subcontractor as an "Additional Insured."

27.4 Scope of Insurance and Special Hazards

The insurance required under Articles 27.2 and 27.3 shall provide adequate protection for the Contractor and his subcontractors, respectively, against damage claims which may arise from operations under this contract, whether such operations be by the insured or by anyone directly or indirectly employed by him and, also against any of the special hazards which may be encountered in the performance of this contract as enumerated in the Special Conditions.

27.5 Proof of Carriage of Insurance

The Contractor shall furnish the Owner with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of policies. Such certificates shall also contain substantially the following statement: "The insurance covered by this certificate will not be canceled or materially altered, except after ten (10) days written notice has been received by the Owner".

27.6 Builder's Risk Insurance (Fire and Extended Coverage)
Until the project is completed and accepted by the Owner, the Contractor is required to maintain Builder's Risk type Insurance (fire and extended coverage) on a 100 percent (100%) completed value basis on the insurable portion of the project for the benefit of the Owner, the Contractor, and subcontractors as their interests may appear.

27.7 Owner's Protective Liability Insurance

The Contractor shall procure and furnish to the Owner and maintain during the life of this Contract complete Owner's Protective Liability Insurance for Bodily Injury Liability Insurance and for Property Damage Liability Insurance.

27.8 Minimum Insurance Requirements

The minimum limits of liability of such insurance shall be as follows:

a) General (Comprehensive) Liability of such insurance shall be as follows:

- Bodily Injury or Death - Each Person $ 1,000,000
- Bodily Injury or Death - Each Accident $ 1,000,000
- Property Damage - Each Accident $ 500,000
- Aggregate $ 2,000,000

b) Automobile and Truck Liability

- Bodily Injury or Death - Each Person $ 1,000,000
- Bodily Injury or Death - Each Accident $ 1,000,000
- Property Damage - Each Accident $ 1,000,000
- Aggregate $ 2,000,000

c) Owner's Protective Liability

- Bodily Injury (each occurrence) $ 1,000,000
- Property Damage, including Explosion, Collapse and Underground Coverage - each occurrence $ 1,000,000
- Aggregate $ 2,000,000

d) Subcontractors General Liability

- Each Occurrence $ 1,000,000
- Aggregate $ 2,000,000

e) Railroad Protective Public and Property Damage Liability (if applicable)

- Each Occurrence $ 1,000,000
- Aggregate $ 2,000,000

28. Contract Security
28.1 The Contractor shall furnish a Performance Bond in an amount at least equal to one hundred percent (100%) of the contract price agreed upon as security for the faithful performance of this contract and also a Payment Bond in an amount not less than one hundred percent (100%) of the contract price or in a sum not less than that prescribed by State, or local law, as security for the payment of all persons performing labor on the project under this contract and furnishing materials in connection with this contract. The Performance Bond and the Payment Bond may be in one or in separate instruments in accordance with local law.

28.2 Bonds must be issued through a resident agent licensed to do business in the State of Vermont.

29. Additional or Substitute Bond

If at any time the Owner for justifiable cause shall be or become dissatisfied with any Surety or Sureties, for the Performance or Payment Bonds, the Contractor shall within five (5) days after notice from the Owner, substitute an acceptable bond (or bonds) in such form and sum and signed by such other Surety or Sureties as may be satisfactory to the Owner. The Contractor shall pay the premiums on such bond. No further payments shall be deemed due nor shall be made until the new Surety or Sureties shall have furnished such an acceptable bond to the Owner.

30. Assignments

The Contractor shall not assign the whole or any part of this contract or any monies due or to become due hereunder without written consent of the Owner. In case the Contractor assigns all or any part of any monies due or to become due under this contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any monies due or to become due to the Contractor shall be subject to prior claims of all persons, firms and corporations for services rendered or materials supplied for the performance of the work called for in this contract.

31. Mutual Responsibility of Contractors

If, through acts of neglect on the part of the Contractor, any other Contractor or any subcontractor shall suffer loss or damage on the work, the Contractor agrees to settle with such other Contractor or subcontractor by agreement or arbitration if such other Contractor or subcontractors will so settle. If such other Contractor or subcontractor shall assert any claim against the Owner on account of any damage alleged to have been sustained, the Owner shall notify the Contractor, who shall indemnify and save harmless the Owner against any such claim.

32. Subcontracting

32.1 The Contractor may utilize the services of specialty subcontractors on those parts of the work which, under normal contracting practices, are performed by specialty subcontractors.

32.2 The Contractor shall not award any work to any subcontractor without prior written approval of the Owner.
32.3 The Contractor shall be as fully responsible to the Owner for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them, as the Contractor is for the acts and omissions of persons directly employed by the Contractor.

32.4 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 in regard to terminating any subcontract that the Owner may exercise over the Contractor under any provision of the Contract Documents.

32.5 Nothing contained in this contract shall create any contractual relation between any subcontractor and the Owner.

33. Authority of Owner and His Representatives

33.1 The Owner will have the authority to suspend the work wholly or in part for such periods as deemed necessary due to the failure of the Contractor to correct conditions unsafe for the workmen or the general public; for failure to carry out provisions of the contract; for failure to carry out orders; for conditions considered unsuitable for the prosecution of the work, including unfit weather; or for any other condition or reason deemed to be in the public interest.

The purpose of the above articles is not in any way to relieve the CONTRACTOR of his responsibilities for the safety of workmen or general public in the execution of the work. Attention is drawn to Article 13 of these Conditions which refers to the safety obligations of the CONTRACTOR.

The OWNER, acting on behalf of the OWNER, has the authority to enforce corrective action for work not in accordance with the specifications or for conditions that are determined unsafe.

The OWNER shall give all orders and directions contemplated under the contract and specifications, relative to the execution or the work. The Owner shall determine the amount, quality, acceptability, and fitness of the several kinds of work and materials which are to be paid for under this contract and shall decide all questions which may arise in relation to said work and the construction thereof. The Owner's estimates and decisions shall be final and conclusive, except as herein otherwise expressly provided. In case any question shall arise between the parties thereto relative to said contract or specifications, the determination or decision of the Owner shall be a condition precedent to the right of the Contractor to receive any money or payment for work under this Contract affected in any manner or to any extent by such question.

In addition, the OWNER, acting on behalf of the OWNER is to ensure that the work is in accordance with the contract documents; the Owner is not held responsible, however, for the methods of construction, sequences, schedules and procedures in the execution of the work. The OWNER does have the opportunity under 33.1 to reject the method of construction, work plan, schedule, procedures, as the Owner thinks appropriate.
In any and all claims against the OWNER, or any of their agents or employees, by any employee of the CONTRACTOR, any SUBCONTRACTOR, anyone directly or indirectly employed by any of them, may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the CONTRACTOR or any SUBCONTRACTOR under workmen's compensation acts, disability benefit acts or other employee benefits acts.

The obligation of the CONTRACTOR under this paragraph shall not extend to the liability of the OWNER, his agents or employees arising out of the preparation or approval of maps, DRAWINGS, opinions, reports, surveys, CHANGE ORDERS, designs or SPECIFICATIONS.

The Owner shall decide the meaning and intent of any portion of the specifications and of any plans or drawings where the same may be found obscure or be in dispute. Any differences or conflicts in regard to their work which may arise between the Contractor under this Contract and other contractors performing work for the Owner shall be adjusted and determined by the Owner.

33.2 The Owner may appoint such assistants and representatives as desired, and they shall be granted full access to the work under the Contract. They shall have the authority to give directions pertaining to the work or to the safety and convenience of the public, to approve or reject materials, to suspend any work that is being improperly performed, to make measurements of quantities, to keep records of costs, and otherwise represent the Owner. The Contractor may, however, appeal from their decision to the Owner himself, but any work done pending settlement is at the Contractor's own risk.

Except as permitted and instructed by the Owner, the assistants and representatives are not authorized to revoke, alter, enlarge, relax, or release any requirements of these specifications, nor to issue instructions contrary to the plans and specifications. They are not authorized to act as superintendents or foremen for the Contractor or to interfere with the management of the work by the Contractor. Any advice which the assistants or representatives of the Owner may give the Contractor shall not be construed as binding the Owner or the Owner in any way, nor releasing the Contractor from the fulfillment of the terms of the contract.

All transactions between the Contractor and the representative of the Owner which are liable to protest or where payments are involved shall be made in writing.

34. Stated Allowances

The Contractor shall include in his contract price any cash allowances stated in the Supplemental General Conditions or Special Conditions. The Contractor shall purchase the "Allowed Materials" as directed by the Owner on the basis of the lowest and best bid of at least three competitive bids. If the actual price for purchasing the "Allowed Materials" is more or less than the "Cash Allowance", the contract price shall be adjusted accordingly. The adjustment in contract price shall be made on the basis of the purchase price without additional charges for overhead, profit, insurance or any other incidental expenses. The cost of installation of the "Allowed Materials" shall be included in the applicable sections of the Contract Specifications covering the work.

35. Use of Premises, Removal of Debris, Sanitary Conditions
The Contractor expressly undertakes at his own expense:

to take every precaution against injuries to persons or damage to property;

to store his apparatus, materials, supplies and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of his work or the work of any other contractors;

to place upon the work or any part thereof only such loads as are consistent with the safety of that portion of the work;

to clean up frequently all refuse, rubbish, scrap materials, and debris caused by his operations, to the end that at all times the site of the work shall present a neat, orderly and workmanlike appearance;

before final payment to remove all surplus material, falsework, temporary structures, including foundations thereof, plant of any description and debris of every nature resulting from his operations, and to put the site in a neat orderly condition;

to effect all cutting, fitting or patching of his work required to make the same to conform to the plans and specifications and, except with the consent of the Owner, not to cut or otherwise alter the work of any other Contractor;

to provide and maintain in a neat, sanitary condition such toilet accommodations for the use of his employees as may be necessary to comply with the requirements of the State and local Boards of Health, or of other bodies or authorities having jurisdiction.

36. Quantities of Estimate

Wherever the estimated quantities of work to be done and materials to be furnished under this contract are shown in any of the documents, they are given for use in comparing bids and the right is especially reserved except as herein otherwise specifically limited, to increase or diminish them as may be deemed reasonably necessary or desirable by the Owner to complete the work contemplated by this contract, and such increase or diminution shall in no way vitiate this contract, nor shall any such increase or diminution give cause for claims or liability for damages.

37. Lands and Rights-of-Way

37.1 Prior to the start of construction, the Owner will obtain all lands and rights-of-way necessary for carrying out and completing the work to be performed under this contract.

37.2 The Contractor shall not (except after written consent from the proper parties) enter or occupy with men, tools, materials, or equipment, any land outside of the rights-of-way or property of the Owner. A copy of the written consent shall be given to the Owner.

38. General Guaranty

Neither the final certificate of payment nor any provision in the Contract Documents, nor partial or entire occupancy of the premises by the Owner, shall constitute an acceptance of work not done in accordance with the Contract Documents or relieve the Contractor of liability in respect to any express guaranties or responsibility for faulty materials or workmanship. The Contractor shall remedy
any defects in the work and pay for any damage to other work resulting therefrom, which appear within the guaranty period one year from the certified date of completion or substantial completion of the work unless a longer period is specified. The Owner will give notice of observed defects with reasonable promptness.

39. Errors and Inconsistency in Contract Documents

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

(1) Supplementary General Conditions will govern General Conditions.

(2) Technical Specifications will govern Supplementary General Conditions and General Conditions.

(3) Plans will govern Technical Specifications, Supplementary General Conditions and General Conditions.

(4) Special Conditions will govern Plans, Technical Specifications, Supplementary General Conditions and General Conditions.

The Contractor shall take no advantage of any apparent error or omission in the plans or specifications. In the event the Contractor discovers such an error or omission, the Contractor shall immediately notify the Owner. The Owner will then make such corrections and interpretations as may be deemed necessary for fulfilling the intent of the plans and specifications.

40. Notice and Service Thereof

Any notice to the Contractor from the Owner relative to any part of this Contract will be in writing and will be considered delivered and the service thereof completed, when said notice is mailed, by certified or registered mail, to the said Contractor at his last given address, or delivered in person to the said Contractor or his authorized representative on the work.

41. Required Provisions Deemed Inserted

Each and every provision of law and clause required by law to be inserted in this Contract shall be deemed to be inserted herein and the Contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the contract shall forthwith be physically amended to make such insertion or correction.

42. Safety and Health Regulations

This project is subject to all of the Safety and Health Regulations (CFR 29, Part 1926, and all subsequent amendments) as promulgated by the U.S. Department of Labor on June 24, 1974. Contractors are urged to become familiar with the requirements of these regulations.

43. Use and Occupancy Prior to Final Acceptance by Owner (Beneficial Occupancy)
43.1 General

Use and occupancy of a portion or unit of the project, upon substantial completion of that portion or unit, and before final acceptance of the entire project, shall be a condition of this contract with the following provisions:

a. The Owner will make his request to the Contractor in writing.
b. There must be no significant interference with the Contractor's operations on other parts of the project.
c. The Owner, upon request of the Owner and agreement by the Contractor, that the portion or unit is substantially complete will make an inspection of the subject part of the project to confirm its status of completion. The Owner will then follow the procedures described in Article 25, "Acceptance and Payment".
d. Consent of the surety and endorsement of the insurance carrier must be obtained prior to use and/or occupancy by the Owner. Furthermore, in the case of building occupation, the Owner will secure the necessary insurance coverage on the building.
e. The Owner will have the right to exclude the Contractor from the subject portion of the project after the date stipulated in the Owner's Certificate but will allow the Contractor reasonable access to complete or correct the items on the Owner's punch list.

The provisions stated above do not apply during the installation or construction phase of this Contract, nor do those provisions restrict use and access by Contractor of the Owner obligated to perform work within the limits of the Project under legal contractual agreement, providing access and use do not infringe upon the work of this Contract.

43.2 Warranty Period

a. Pipeline, building, and other structures: Upon use or occupancy of pipeline or structure, by the Owner, the warranty period shall begin and run for a period of one (1) year.
b. Mechanical equipment, pumps, etc.: The one year (1) warranty period of such equipment shall begin only after a specified test period has been completed and the equipment has demonstrated an ability to perform in accordance with the technical specification.
c. Sitework: Upon issuance of certificate of substantial completion, the warranty period shall extend for one (1) year.
d. Pavement: Upon issuance of certificate of substantial completion, the warranty period shall extend for two (2) years.

44. Photographs of the Project

If required by the Owner, the Contractor shall furnish photographs of the project, in the quantities and as described in the Special Conditions.

45. Suspension of Work

45.1 The Owner may, at any time and without cause, suspend the Work or any portion thereof for a period of not more than ninety days by notice in writing to the Contractor and the Owner which shall fix the date on which Work shall be resumed. The Contractor will resume the work on
the date so fixed. The Contractor will be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension if the Contractor makes a claim therefor as provided in Articles 18 and 21.

45.2 In the event of a suspension of Work initiated by the Contractor for any reason including, but not limited to, winter shut-down, settlement of claims, delay in delivery of materials, the Owner shall receive thirty (30) days prior notice, in writing, giving detailed reasons for the suspension of work and an approximate date of resumption of work.

46. Signs

The Contractor shall furnish and erect such signs as are required and described in the Supplemental General Conditions.

47. Public Convenience and Traffic Control

47.1 The Contractor shall at all times so conduct his work as to assure the least possible obstruction to traffic. The safety and convenience of the general public and the residents along the project route and the protection of persons and property shall be provided for by the Contractor. The Contractor shall be responsible for proper and timely notification to local residents before making any interruptions of their access.

47.2 Fire hydrants and water holes for fire protection on or adjacent to the project site shall be kept accessible to the fire apparatus at all times, and no obstructions shall be placed within 10 feet of any such facility. No footways, gutters, sewer inlets, or portions of highways adjoining the project site shall be obstructed more than is necessary. In the event that all or part of a roadway is officially closed to traffic during construction, the Contractor shall provide and maintain safe and adequate traffic accommodations, satisfactory to the Owner, for residences and businesses along and adjacent to the roadway so closed.

47.3 When the maintenance of traffic is considered by the Owner to be of minor significance, certain contracts may not show this work as a pay item. In such cases, the Contractor shall bear all expense of maintaining traffic over the sections of road undergoing improvement and of constructing and maintaining such approaches, crossings, intersections, and other features as may be necessary, without direct compensation.

48. Pre-Construction Conference

The Contractor shall not commence work until a conference has been held at which representatives of the Contractor and Owner is present. The Owner will arrange the pre-construction conference.

49. Maintenance during Construction

49.1 The Contractor shall maintain the work during construction and until the project is accepted. This maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and forces, to the end that roads or structures are kept in satisfactory condition at all times.
49.2 All cost of maintenance work during construction and before the project is accepted shall be included in the unit prices bid on the various pay items and the Contractor will not be paid an additional amount for such work.

49.3 If the Contractor, at any time, fails to comply with the provisions above, the Owner may direct the Contractor to do so. If the Contractor fails to remedy unsatisfactory maintenance within the time specified in any such order, the Owner may immediately cause the project to be maintained and the entire cost of this maintenance will be deducted from money due or to become due the Contractor on this contract.

50. Cooperation with Utilities

50.1 The Owner will notify all utility companies, all pipe line owners, or other parties affected, and endeavor to have all necessary adjustments of the public or private utility fixtures, pipe lines, and other appurtenances within or adjacent to the limits of construction made as soon as practicable.

50.2 Water lines, gas lines, wire lines, service connections, water and gas meter boxes, water and gas valve boxes, light standards, cableways, signals, and all other utility appurtenances within the limits of the proposed construction which are to be relocated or adjusted are to be moved by the owners of such utilities at their expense, except as may otherwise be provided for in the Special Conditions or as noted on the plans.

50.3 It is understood and agreed that the Contractor has considered all of the permanent and temporary utility appurtenances in their present or relocated positions as shown on the plans and as evident on the site, and that no additional compensation will be allowed for any delays, inconvenience, or damage sustained by him due to any interference from such utility appurtenances or the operation of moving them.

50.4 The Contractor shall cooperate with the owners of any underground or overhead utility lines in their removal and rearrangement operations in order that these operations may progress in a reasonable manner, that duplication of rearrangement work may be reduced to a minimum, and that services rendered by those parties will not be unnecessarily interrupted.

50.5 In the event of interruption to water or utility services as a result of accidental breakage or as a result of being exposed or unsupported, the Contractor shall promptly notify the proper authority and shall cooperate with the said authority in the restoration of services. If water service is interrupted, repair work shall be continuous until the service is restored. No work shall be undertaken around fire hydrants until provisions for continued service have been approved by the local fire authority. If any utility service is interrupted for more than 4 hours, the Contractor shall make provisions for temporary service at his own expense until service is resumed.

51. Work Performed at Night and on Sundays and Holidays

51.1 No work will be permitted at night or on Sundays or holidays except as approved in writing by the Owner, or as provided elsewhere in these documents, and provided such work is not in violation of a local ordinance. When working at night, the Contractor shall provide flood
lighting sufficient to insure the same degree of accuracy of workmanship and the same conditions regarding safety as would be achieved in daylight.

51.2 Whenever Memorial Day or Fourth-of-July is observed on a Friday or a Monday and during the weekend of Labor Day, the Contractor may be required to suspend work for the three calendar days. Prior to the close of work, the project shall be placed in the best possible condition for the comfort and safety of the traveling public, and arrangements shall be made for responsible personnel to maintain the project in the above conditions.

52. Laws to be observed

The Contractor shall keep fully informed of all Federal and State laws, all local laws, ordinances, and regulations, and all orders and decrees of bodies of tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the work, or which in any way affect the conduct of the work. He shall at all times observe and comply with all such laws, ordinances, regulations, orders, and decrees; and shall protect and indemnify the Owner and its representatives against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by himself or his employees.

53. Permits

53.1 Permits and licenses of a temporary nature necessary for the prosecution of the work shall be secured and paid for by the Contractor. Permits, licenses and easements for permanent structures or permanent changes in existing facilities will be secured and paid for by the Owner, unless otherwise specified in the Supplemental General Conditions. The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the work as drawn and specified. If the Contractor observes that the Drawings and Specifications are at variance therewith, the Contractor shall promptly notify the Owner in writing, and any necessary changes shall be adjusted as provided for in the Contract under Extra Work and Change Orders.

Some, but not necessarily all, of such required permits are as follows:

53.2 Highway Excavation

Any individual, firm, or corporation wishing to make an opening in the highway must secure a permit from the Town of Hartford Public Works Department.

53.3 Burning Permit

If burning of debris and brush is permitted by the Owner, local and State authorities, the Contractor shall obtain all required permits from Forest and/or Fire control authorities.

53.4 Control of Pollution Due to Construction

a. During construction, the Contractor shall take precautions sufficient to avoid the leaching or runoff of polluting substances such as silt, clay, fuels, oils, bitumens, calcium chloride and any other polluting materials which are unsightly or which may be harmful to humans, fish, or other life, into groundwater and surface waters of the State.
b. In waters used for public water supply or used for trout, salmon, or other game or forage fish spawning or nursery, control measures must be adequate to assure that turbidity in the receiving water will be increased not more than 10 standard turbidity units (s.t.u.) in the absence of other more restrictive locally-established limitations, unless otherwise permitted by the VTANR. In no case shall the classification for the surface water be violated unless otherwise permitted by the VTANR.

c. In water used for other purposes, the turbidity must not exceed 25 s.t.u. unless otherwise permitted by the VTANR.

54. Indemnification

The Contractor will indemnify and hold harmless the Owner and the Owner and their agents and employees from and against all claims, damages, losses and expenses including attorney's fees arising out of or resulting from the performance of the Work, provided that any such claims, damage, loss or expense if attributable to bodily injury to or destruction of tangible property including the loss of use resulting therefrom: and is caused in whole or in part by any negligent or willful act of omission of the Contractor, and Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

55. Arbitration

Any controversy arising out of or relating to this contract or the breach thereof shall be settled by arbitration. The parties shall select an arbitrator. The arbitrator shall adopt appropriate arbitration rules similar to the American Arbitration Association or any other arbitration procedure. The place of arbitration shall be in the town/city within which the contract shall be principally performed. The arbitration hearing shall be held within thirty (30) days after the notice of arbitration is delivered by one party to the other party. In the event the parties are unable to agree on the arbitrator then application can be made to the Superior Court for the County within which the contract shall be principally performed under RSA Chapter 542.
SPECIAL CONDITIONS

1. CONTRACTOR'S EMERGENCY SERVICE
   
   A. Any CONTRACTOR whose place of business is located beyond the vicinity of the site of the work and who does not maintain local headquarters 24 hours a day must make satisfactory arrangements with the OWNER to service emergencies or complaints which may occur at night, over the weekend, or when the job is shut down. If the Contractor does not, the OWNER may make arrangements and the cost will be charged to the CONTRACTOR.
   
   B. Before the final estimate is certified for payment, the CONTRACTOR shall make similar arrangements to cover the guarantee period.

2. WORK AREA
   
   A. In general, the limits of work lines will be property and easement lines as defined on the drawings, and represent the bounds within which the CONTRACTOR shall perform all construction operations. Rights to occupy or use additional lands which may be desired or required by the CONTRACTOR for access to the work area or for erection of temporary structures, storage of materials or additional working space shall be obtained by the CONTRACTOR at no additional cost to OWNER. Approval to use or store materials on land of the OWNER shall be obtained from the OWNER.

3. WORK IN FREEZING WEATHER
   
   A. Unless written permission is given, work liable to be affected by frost shall be suspended during freezing weather. When work proceeds in such a condition, the CONTRACTOR shall provide approved facilities for heating the materials and for protecting the finished work.
   
   B. In laying pipe or placing concrete or brick masonry during freezing weather, the CONTRACTOR shall take all necessary precautions for removing the ice and frost from materials, and shall thoroughly heat the water, sand and gravel or crushed stone used, so that the mortar and concrete shall be warm throughout when placed in the work; shall provide satisfactory covering for the newly-laid pipe or masonry by tarpaulin, wood and building paper shelters, or other approved means; and shall provide approved artificial means for keeping the air warm and moist beneath said covering for securing work satisfactory in all respects. The OWNER may, however, prohibit the laying of pipe or masonry or placing of concrete at any time when, in his judgment, the conditions are unsuitable or the proper precautions are not being taken, whatever the weather may be, in any season.
   
   C. Temporary heating apparatus shall be installed and operated in such manner that the finished work will not be damaged.
4. PIPE LOCATIONS

A. Proposed pipelines will be located as close as possible to what is indicated on the drawings, but the OWNER reserves the right to make such modifications in location as may be found desirable to avoid interference with existing structures or for other reasons. Where fittings are noted on the drawings, such notation is for the CONTRACTOR's convenience and does not relieve him from installing different or additional items where required without additional compensation.

5. UTILITIES

A. The cost of relocation, alterations, or repair of damage to electric, telephone and cable television utilities, which are encountered and found to interfere with the proposed work, will be borne by the CONTRACTOR. The CONTRACTOR shall protect and support these utilities where their existing location does not interfere with the proposed work. Any cost of temporary relocations for the CONTRACTOR's convenience shall be paid for by the CONTRACTOR. The CONTRACTOR shall notify the landowners of any service lines that may need relocation or alternations at least 72 hours prior to the construction work.

B. The CONTRACTOR shall notify the utility companies of his operations at least 72 hours (3 working days) in advance and take all measures to avoid damage or interruption to their services. Poles will, in general, be braced by the pole owners.

C. Relocation work shall be conducted in such a manner that if it becomes necessary to change the location of any water pipes, drains or other structures not specifically provided for herein, the structures shall not be interfered with or disturbed until the OWNER has made the necessary arrangements with the owners of the structures, which will be done as promptly as the CONTRACTOR shall do the whole or any portions of the work of making such changes as the OWNER may require, and shall receive payment therefore in accordance with the "Extra Work" provision of the contract as set forth under the contract, unless otherwise provided for herein. No extra work payments shall be made for replacing, rebuilding, or relocating underground structures that are damaged by the CONTRACTOR's negligence through failure to comply with the requirements of these specifications.

D. The CONTRACTOR shall make all arrangements with the utility companies for temporary and permanent services subject to the conditions further described herein, and in the various technical specifications.

6. EXISTING UTILITIES

A. Existing utilities may be found within the construction area. Locations of known existing utilities are shown on the plans, from the best information available. However locations shown are only approximate, and should be verified by exploratory test pits before construction where there is possibility of interference.
B. The CONTRACTOR shall immediately notify the OWNER (Police Department and Public Works Department) upon any damage or interruptions of service to any utility, whether owned by the municipality, private company, or private landowner.

7. PROTECTION OF WORK

A. The CONTRACTOR shall be held responsible for the maintenance and protection of all work installed under this Contract prior to acceptance by the OWNER.

B. The cost of repairs, if any, will be borne by the CONTRACTOR, and will not be considered as an additional expense to the OWNER. If the repair is to one of the OWNER's systems, the CONTRACTOR shall reimburse the OWNER for any assistance, including, but not limited to: supervision, labor, equipment, and material.

8. SURVEY AND LAYOUT

A. Benchmark locations have been established and are shown on the Drawings for vertical control. It is the CONTRACTOR's responsibility to preserve and maintain the benchmarks.

B. Re-establishment of controls provided shall be the responsibility of the CONTRACTOR, with no additional expense to the OWNER.

C. Section 10.1 of the GENERAL CONDITIONS is superseded by:

The Right-of-Way (ROW) and property lines are approximate based upon information available. The CONTRACTOR shall maintain construction to within these boundaries, except when otherwise shown on the Drawings.

D. Section 10.2 of the GENERAL CONDITIONS is superseded by:

The CONTRACTOR shall be responsible for all Construction Survey including, but not limited to, roadway, structure, and utility locations and layout. All layouts shall meet the approval of the OWNER.

E. The CONTRACTOR shall not disturb any property pins or markers during construction. If a property pin or marker is disturbed, the CONTRACTOR shall be responsible for restoring the pin or marker to its proper location via a licensed land surveyor.

9. LOCAL TRAFFIC

A. The CONTRACTOR shall maintain one-way local traffic at all times. In the event that road closure is absolutely necessary, the OWNER (Public Works and Police Departments) shall be notified at least 72 hours (3 working days) in advance. The maximum duration of the closure shall be specified with this notification. The CONTRACTOR shall coordinate school bus traffic with the School District.
10. INSURANCE
   A. The CONTRACTOR and any of his subcontractors shall name the OWNER and the OWNER as Additional Insured for all insurance policies.

11. SUBSTANTIAL COMPLETION/WARRANTY
   A. The OWNER shall have beneficial use of completed systems of the Project prior to the Project Substantial Completion date. However, the warranty periods for completed systems shall begin on the Project Substantial Completion date. Furthermore, the OWNER will not be required to request for the beneficial use prior to the Project Substantial Completion date.

13. MISCELLANEOUS WORK
   A. The CONTRACTOR shall submit a schedule of values for Miscellaneous Work with the Bid Proposal for review by the OWNER and the OWNER.

14. FLAG PERSON CERTIFICATION
   A. The CONTRACTOR shall utilize certified flaggers for this project when traffic control is necessary.

15. EXISTING UTILITY VERIFICATION
   A. The CONTRACTOR shall verify the location of all utilities prior to the commencement of the Work. DIG-SAFE shall be notified at least three (3) working days prior to any work.

16. SCHEDULE OF SHIM AND OVERLAY WORK
   A. The CONTRACTOR shall make every attempt possible to complete all shim and overlay work prior to beginning other paving work. It is the project goal to complete the shim and overlay portions of the project during warm weather to reduce pavement quality and warrantee issues caused by cold weather paving.

17. INSURANCE
   C. The CONTRACTOR shall procure and maintain, at his own expense, during the CONTRACT time, liability insurance as hereinafter specified in lieu of the amounts shown in the General Conditions and Supplemental General conditions:

   Revises limits of liability as set forth in General Conditions Section 27 and Supplemental General Conditions (SGC-27)

   Workmen's Compensation Statutory Requirements apply
Employer's Liability Insurance  $1,000,000 each accident, $500,000 disease policy limit $100,000 each employee

Commercial General Liability  $1,000,000 each occurrence bodily injury and property damage, $2,000,000 general aggregate – include per project endorsement, $2,000,000 projects/completed operations aggregate.

Owner's Protective Liability  $2,000,000 aggregate

Comprehensive Automotive Liability  $1,000,000 combined single limit for bodily injury and property damage.

Commercial Umbrella Liability  $1,000,000 each occurrence, $1,000,000 aggregate

Builders Risk – all risk  Insurable Value of contract

Blasting coverage shall be obtained by the CONTRACTOR for blasting under this CONTRACT. No blasting shall be done until such insurance has been secured.

END OF SECTION
SUMMARY OF WORK

PART 1.00 GENERAL

1.01 PROJECT IDENTIFICATION

A. The project name is 2023 Summer Paving / Reclamation Projects.

1.02 DESCRIPTION OF WORK

A. The proposed work for the 2023 Summer Paving / Reclamation Projects will consist of furnish and installing: roadway reclamation, milling and resurfacing; roadway shimming and paving; adjusting manhole covers, catch basins and value boxes; and related miscellaneous and restoration work. Erosion/sedimentation control, dust control, and traffic control shall also be maintained throughout the project duration.

B. The CONTRACTOR shall provide complete systems, tested and ready for use.

1.03 COORDINATION

A. The requirements of this Contract include complete coordination with Utility standards, construction specifications and site representatives.

B. This Contract requires coordination and cooperation with all others working within the site area, including but not limited to, building contractors; municipal representatives; various contractors; utility companies (i.e. Green Mountain Power Company, Consolidated Communications, Comcast, etc); local and State agency personnel; and all others to whom access may not be restricted.

C. This Contract requires coordination with emergency service providers such as Police and Fire Departments within the respective municipalities.

END OF SECTION
MISCELLANEOUS WORK AND CLEANUP

PART 1.00 GENERAL

1.01 DESCRIPTION OF WORK

A. Provide all labor, materials and equipment necessary to complete miscellaneous items and cleanup not specified elsewhere for the Project. This section includes the following:

1. Mobilization and demobilization.
2. The cost of bonds and insurance.
3. Temporary Facilities and Controls.
4. Provide assistance to the Construction Monitors for submittal of documentation to the OWNER for review and acceptance.
5. Project cleanup
6. Coordination and cooperation with utility companies, as required.
7. Continuous and ongoing coordination and cooperation with municipal officials and construction monitors, and emergency service providers.
8. Disposal of unsuitable materials, other than Excavation below Grade, in an acceptable manner and location.
9. Excavation and work around existing utilities within the Project limits, but not specifically itemized in the Bid Proposal, as necessary.
10. Maintenance of temporary flows (i.e. drain, etc.) during construction as approved by the Owner.
11. Removal and reset of existing street and traffic signs, as necessary.
12. Saw cutting and/or wheel cutting of existing concrete and bituminous concrete materials.
13. Protection or removal and restoration of existing physical features, i.e. mailboxes, fences, steps, planters, and other items not specifically noted in the Bid Proposal. Protection shall be in a manner acceptable to the Owner. Restoration shall be to at least the original condition of the physical feature and acceptable to the OWNER and the Contract Monitors.
14. Protection or removal and restoration of existing landscape feature, i.e. shrubbery, bushes, trees, etc., in a manner acceptable to the OWNER and the Contract Monitors. Restoration shall be to at least the original condition of the landscape feature.
15. Any other work required to satisfactorily complete the Project.
PART 2.00 EXECUTION

2.01 COOPERATION WITH OTHERS

A. Delays in the Work caused by the actions of others shall be expedited as promptly as possible by the OWNER(s). The Contractor shall notify the OWNER of any delays caused by circumstances beyond his control.

2.02 SCHEDULE OF VALUES

A. Submit a detailed breakdown of miscellaneous work items in the form of a schedule of values with the Bid Proposal for review by the Contract Monitors and the OWNER. The schedule of values will be used for partial payment of the included miscellaneous items.

B. Failure to comply with the requirements of related Sections or of items listed herein shall be cause for the withholding of sums defined in the lump sum breakdown schedule of values.

END OF SECTION
MEASUREMENT AND PAYMENT

PART 1.00 GENERAL

1.01 DESCRIPTION

1. This section describes the measurement and payment for the Work to be completed under each bid item in the Proposal. Work specified but not specifically designated as a Proposal Item is considered incidental.

2. Payment Procedures are described in the Agreement, General Conditions, Purchase Orders, and / or as determined during the Pre-construction meeting.

3. All pay items include mobilization and demobilization, restoration of growth, erosion control, traffic control and miscellaneous work and cleanup necessary for the successful completion of work described in these specifications.

1.02 DESCRIPTION OF PAY ITEMS

A. Items 1a, 1b – Bituminous Concrete Reclamation and Milling

1. Payment for bituminous concrete reclamation and milling shall be at the unit price as stated in the Bid Proposal.

2. Measurement for payment for bituminous concrete reclamation and milling shall be the actual number of square yards as determined by in-place measurement, as measured jointly by the Contractor and Contract Monitor and accepted by the Owner.

3. Payment includes all equipment, labor, saw cutting, scarifying, pulverizing, excavation, handling, sweeping, cleaning, traffic control, additional gravel materials as required to meet the reclaim material specification, grading, compaction, and all else necessary to complete the item including placing excess millings in owner supplied dump trucks.

B. Items 2, 3a, 3b, 3c, 4 – Bituminous Concrete

1. Payment for bituminous concrete pavement shall be at the unit price per ton as stated in the Bid Proposal.

2. Measurement for payment shall be by the actual number of tons in place based on either load slips collected and verified in the field by the Contract Monitor.
3. Payment includes tack coat(s), bituminous concrete material, hauling, placing, fine grading, compacting, sweeping, cleaning, milling joints, traffic control, and all else necessary to complete the items.

C. Items 5, 6, 7 – Structure Adjustments
1. Payment for raising structures with up to 30" inside diameter openings / valves shall be at the unit price each as stated in the Bid Proposal. Payment shall include removal of up to 2" of pavement from structure surface in order to access and raise the structures.
2. Measurement for payment shall be based on the number of structures / values raised to final paved surface as approved by the Contract Monitor.
3. Payment includes all labor, equipment, materials, and all else necessary to complete the items.

C. Item 10 – Shoulder Gravel/Stone
1. Payment for Shoulder Gravel/Stone shall be at the unit price per linear foot at 1 foot in width as stated in the Bid Proposal.
2. Measurement for payment of Shoulder Gravel/Stone shall be the actual number of linear feet as jointly measured and accepted in the field by the Contractor and Contract Monitor. Shoulder Gravel/Stone shall be a minimum 3 inches in depth, 1 foot in width as measured in place providing structural backup of pavement edge.
3. Payment includes excavation as required, disposal of the excavated materials, stone materials, hauling, placing, compaction and all else necessary to complete the item.

D. Item 11 – Painted Center & Fogg Lines
1. Payment for pavement markings shall be at the unit price as stated in the Bid Proposal.
2. Measurement for payment shall be jointly measured and approved by the Contractor and Contract Monitor based on existing field conditions.
3. All Pavement Marking shall be in accordance with the VTRAN Standard Specification for Construction Section 708-Paint Materials and Mixed Paint
Pavement Markings and shall conform to the VTRAN Standard details for those items.

4. Payment includes all labor, equipment, materials, layout, sweeping, placing and all else necessary to complete the items.

E. **Item N/A – Coarse Crushed Gravel**

1. Town of Hartford shall pay for and place the coarse crushed gravel / bank run gravel required for pavement reclaim – Method B.

F. **Item N/A – Transport Millings**

1. Town of Hartford shall be responsible for transporting excess millings from the work site to a municipal storage facility.

END OF SECTION
TESTING AND LABORATORY SERVICES

PART 1.00 GENERAL

1.01 DESCRIPTION

A. Work Included:

The OWNER may require testing be performed to determine that materials or workmanship provided meet the specified requirements; such testing includes, but is not necessarily limited to:

1. Soil compaction

2. Soils and materials gradation analyses

B. Related Work Described Elsewhere:

Requirements for testing are described in various Sections of these Specifications; where testing requirements are not specifically described, but required by the OWNER, testing will be performed under current applicable standards for testing.

C. Work Not Included:

1. Selection of testing laboratory:

The OWNER will select a prequalified independent testing laboratory.

2. Payment for initial testing services:

The OWNER will pay for all initial services of the testing laboratory as further described in Article 3.01 of this Section of these Specifications.

3. The CONTRACTOR shall pay for testing of pipe, manholes, and other similar "installed work".

1.02 QUALITY ASSURANCE

A. Qualifications of Testing Laboratory:

The testing laboratory will be qualified to meet ASTM requirements relevant to the material tested and respective test performed.
B. Promptly process and distribute all required copies of test reports and related instructions to ensure all necessary re-testing and/or replacement of materials with the least possible delay in progress of Work.

PART 2.00 PRODUCTS

None in this section.

PART 3.00 EXECUTION

3.01 PAYMENT FOR TESTING SERVICES

A. The OWNER shall pay for all initial testing services requested by the Contract Monitors, unless otherwise specified.

B. When tests indicate noncompliance with the Contract Documents, all subsequent re-testing occasioned by the non-compliance shall be performed at the Contractor's expense.

C. Testing of all constituents used in concrete mixtures or of trial test batches of concrete for the purposes of establishing an acceptable design mix for concrete shall be at the Contractor's expense.

3.02 CODE COMPLIANCE TESTING

Inspections and tests required by codes or ordinances, or by a plan approval authority, and made by a legally constituted authority, shall be the responsibility of and shall be paid for by the CONTRACTOR, unless otherwise provided in the Contract Documents.

3.03 CONTRACTOR'S CONVENIENCE TESTING

Inspection or testing performed exclusively for the Contractor's convenience shall be the sole responsibility of the CONTRACTOR.

3.04 COOPERATION WITH TESTING LABORATORY

Representatives of the testing laboratory shall have access to the Work at all times. Facilities shall be provided in order that the laboratory may properly conduct all required on-site testing.

3.05 SCHEDULES FOR TESTING

A. Establishing Schedule:

   1. Notify the OWNER and Test Laboratory when the Work will be ready for testing.
Allow adequate time for test scheduling.

2. If scheduled tests cannot be performed because of incomplete Work by the CONTRACTOR, costs resulting from the delay shall be paid for by the CONTRACTOR.

B. When changes of construction schedule are necessary during construction, coordinate all such changes of schedule with the testing laboratory as required.

3.06 TAKING SPECIMENS

A. The testing laboratory shall procure all samples and specimens, shall provide all necessary test equipment and personnel and make all deliveries of samples to the laboratory.

END OF SECTION
PROJECT CLOSEOUT

PART 1.00 GENERAL

1.01 DESCRIPTION OF WORK

A. Definitions: "Closeout" is defined as a checklist of general requirements near the Contract deadline, in preparation for final acceptances, final payment, normal contract completion or occupancy by the OWNER and similar actions evidencing completion of work.

"Closeout" is directly related to "substantial completion" and may be a single time period or a succession of time periods for segments of the work which have been certified by the OWNER as substantially complete on varying dates.

1.02 REQUIREMENTS FOR SUBSTANTIAL COMPLETION

A. General: Prior to a request for OWNER'S inspection for certification of substantial completion, complete the following list and include known exceptions in the request:

1. Progress Payment Request: Show either 100% completion for work claimed, and value, or show incomplete items, value and reason for being incomplete.
2. Include supporting documentation for completion as required by these Contract Documents.
3. Advise OWNER of impending insurance changeover requirements.
4. Submit specific guaranties, maintenance bonds and agreements, final certification and related documents.
5. Deliver tools, spare parts, materials, stocks and equipment to the OWNER.
6. Remove temporary facilities and utility services.

B. Inspection Procedures: The OWNER will proceed with Final Inspection upon receipt of Contractor's request or notification of completion of above requirements.

Following inspection, the OWNER will either issue Certification of Substantial Completion or Punch List detailing work to be done prior to issuance of Certificate.
1.03 REQUIREMENTS FOR FINAL ACCEPTANCE

A. General: Prior to requesting the OWNER'S final inspection for Certification of Final Acceptance and final payment as defined by General Conditions, satisfy the following criteria and list exceptions:

1. Submit final payment request with final releases, invoices and supporting documentation. Include Certificates of Insurance for products and equipment, if required.
2. Submit updated final statement, accounting for final changes to Contract sum.
3. Submit final punch list with corrected items endorsed by Contract Monitors.
4. Submit, if applicable, final liquidated damages statement, endorsed by OWNER.
5. Revise and submit evidence of final continuing insurance coverage meeting insurance requirements (General Conditions, etc.).

B. Re-inspection Procedure: Upon Contractor's notice that punch list work toward Certificate of Final Acceptance has been completed, Contract Monitors will re-inspect the work. ENGINEER OWNER will either prepare Certificate of Final Acceptance or order re-working of punch list items found deficient or not fulfilled as required for final acceptance.

1.04 RECORD DOCUMENTS SUBMITTALS

A. General: See individual sections of these Specifications for specific requirements. Provide access to records for OWNER'S reference.

B. Record Specifications: Where required, maintain one copy of notated Specifications showing Addenda and Change Orders. Show substitutions, options selected and similar information on work that is concealed. Cross reference to other documents.

C. Record Product Data: Maintain one copy of each product data submittal. If a change occurs from the original submittal, include both submittals for comparison. Pay particular attention to documenting concealed items, not readily identified at a later date.

END OF SECTION
BITUMINOUS CONCRETE PAVEMENT

PART 1.00 GENERAL

1.01 DESCRIPTION OF WORK

A. Provide bituminous concrete pavement as specified herein.

B. Provide hot poured crack sealant per VTRANS Section 417.

1.02 QUALITY ASSURANCE

A. Standards shall be the Vermont 2018 edition of Standard Specifications for Construction, Division 400, hereinafter referred to as VTRANS "Standard Specifications".

B. Pavement supplier and Plant shall be as specified in VTRANS "Standard Specifications".

1.03 SUBMITTALS

A. Material certificates shall be signed by producer and CONTRACTOR stating that each material complies with specified requirements.

B. Design mix provisions for each type of pavement specified to be submitted 7 days in advance of paving.

C. Certified weigh slips submitted for each truck load of bituminous concrete materials delivered and placed.

1.04 JOB CONDITIONS

A. Weather limitations shall be as indicated in VTRANS "Standard Specifications" Section 409.0.3.

1. Base course placement shall be placed at ambient temperature above 40 degrees F.

2. Wearing course placement shall be at ambient temperature above 50 degrees F.

PART 2.00 PRODUCTS

2.01 GRAVEL SUBBASE

A. Refer to Section 02616 Reclaim Bituminous Concrete Pavement and Section 02223 - Roadway Excavation, Backfill and Compaction.

2.02 ASPHALT CEMENT

A. Grade as specified to comply with Section 702 of the VTRANS "Standard Specifications".
2.03 BITUMINOUS CONCRETE PAVEMENTS

A. Comply with the material requirements VTRANS "Standard Specifications", Section 406.03C.
B. **Base Courses** (Binder): Type-II.
C. **Wearing Course**: Type-III.
D. **Shims**: Type-III or IV.
E. **Overlay**: Type-III.
F. **Sidewalk (1 course)**: Type-III
G. **Sidewalk (2 course)**: Type II and Type III Wear Course
H. **Walkway (1 course)**: Type-III
I. **Driveway Aprons**: Type-III or type IV (Hand placed)

2.04 BITUMINOUS TACK COAT

A. Comply with VTRANS "Standard Specifications" Section 410.
B. **Grade**: RS-1.

2.05 HOT POURED CRACK SEALANT

A. Comply with materials specified in VTRANS “Standard Specifications” Section 417.

2.06 PAINT AND TRAFFIC MARKINGS

A. Comply with Section 708 of the VTRANS “Standard Specifications.”
B. **Yellow Traffic Paint**: VT 7.05 (Latex)
C. **White Traffic Paint**: VT 7.06 (Latex)
D. Non-removable thermoplastic material shall conform to FHWA standards for reflectivity and color.
PART 3.00 EXECUTION

3.01 PREPARATION

A. Prior to application of shims / overlays and wearing pavement ensure all pavements are clean and free of debris by sweeping.

B. Prior to application of wearing surface, raise utility casings to final grade. Between raising and the application of pavement, the edge of the utility casing will be painted with fluorescent orange paint.

3.01 SUBBASE

A. Aggregate subbase shall be installed in accordance with Excavation; or VTRANS "Standard Specification", DIV. 300 and 304.

3.02 BITUMINOUS CONCRETE PAVEMENT

A. Transverse joints with existing pavement shall be cut back at a depth sufficient to allow placement of new pavement at the specified depth.

B. All utility covers and edges of existing pavement shall be painted with a suitable bituminous coating.

C. Pavement courses shall be spread continuously by a suitable paving machine to line, grade and thickness specified.

D. Paving machines and compaction rollers shall meet the minimum requirements of the VTRANS "Standard Specifications", DIV 300.

E. Permanent Bituminous Concrete base course shall be placed to a compacted thickness as noted in the Section 00101 Project summary or as directed by the CONTRACT MONITORS. In areas that have been reclaimed, the base course pavement shall be placed no later than seven (7) days following final completion of the reclamation process.

F. Permanent Bituminous Concrete wearing course shall be placed to a compacted thickness as noted in the Section 00101 Project summary or as directed by the CONTRACT MONITORS.

G. Sidewalk Bituminous Concrete single course shall be placed to a compacted thickness as noted in the Section 02775 or as directed by the CONTRACT MONITORS.
3.03 BITUMINOUS TACK COAT

A. Apply tack coat, as required or at the direction of the CONTRACT MONITORS, immediately prior to paving against curbing, gutters, manholes and existing pavement for adequate bond.

B. Tack coat generally not required on new base pavement courses. Apply to existing weathered pavement at a rate of 0.03 to 0.04 gallons per square yard.

3.04 TEMPORARY TRENCH PAVEMENT

A. Aggregate subbase gravel as required in VTRANS "Standard Specification", or as shown on the Drawings.

B. Temporary Trench Pavement shall be installed in high traffic areas as determined by the CONTRACT MONITORS. Temporary trench pavement shall be a single course of Type II mix 1-3/4 inches in thickness. Removal of this pavement will be required before installation of full depth permanent trench pavement.

C. Temporary pavement shall be compacted to full density, flush with existing pavement surface.

D. Temporary pavement shall be maintained until the permanent pavement is installed. Temporary pavement shall be periodically inspected and repaired as necessary, especially during the winter months.

3.05 PERMANENT TRENCH AND REPLACEMENT PATCH PAVEMENT

A. Aggregate subbase gravel as required in Section 02223 - Roadway Excavation, Backfill and Compaction, VTRANS "Standard Specification", or as shown on the Drawings.

B. Permanent Trench Pavement in areas that will not receive an overlay shall be placed following the removal of the temporary trench pavement. Existing pavement edges shall be cut to neat lines and square edge and the subbase replace (as needed), graded and compacted. Permanent trench pavement shall be installed and compacted to match that of the existing pavement. Any pavement work required outside of the permanent trench pavement pay limits shall be installed at the CONTRACTOR's own expense.

C. Permanent Trench Pavement in areas that will receive an overlay shall have the base course be installed to full depth to match the existing pavement. Existing pavement edges shall be cut to neat lines and square edge and the subbase replaced and graded to match that of the existing roadway. Any pavement work required outside of the permanent trench pavement pay limits shall be installed at the CONTRACTOR's own expense.

D. Regrade base material and compact as required.

E. Clean and apply tack coat to the cut edges.

F. Where full width pavement on a roadway is to be installed, the following shall be performed before full width overlay:
1. Level pavement to conform to the grade and crown of original pavement. Pavement required to level the trench pavement shall be placed at the CONTRACTOR’s expense.

2. Clean pavement and apply bituminous tack coat.

3.06 OVERLAY OF EXISTING PAVEMENT

A. Shim areas where overlay surface course thickness would exceed 2 inches. Tack coat required as directed by the CONTRACT MONITORS in accordance with VTRANS "Standard Specifications".

B. Overlay shall be applied as required in the Contract Specifications or as directed by the Contract Monitors.

3.07 DRIVEWAY APRONS

A. Driveway apron shall taper to existing grade at driveways a minimum of 2' into driveway. In addition, tapers shall be graded so as not to hold water. Tapers shall terminate parallel to the edge of roadway where possible and at a straight line.

3.08 HOT Poured CRACK SEALANT

A. Placement shall comply with VTRANS “Standard Specifications”.

3.09 TRAFFIC AND PAVEMENT MARKINGS (By others)

A. Provide all pavement striping and markings as determined based on current field conditions.

B. This includes provision placement and maintenance of temporary pavement markings as directed by the Contract Monitors.

C. Comply with the provisions of the "Manual on Uniform Traffic Control Devices" for all traffic markings.

3.10 PAVEMENT REPLACEMENT - TOWN OR STATE ROADS

A. Provide gravel and pavement as required by the terms of the Highway Opening Permit.

B. Temporary and permanent pavement shall be applied in accordance with Town or VTRANS.

3.11 GUARANTEE

A. The CONTRACTOR shall maintain pavement placed under the terms of the Contract for a period of two (2) years.

B. The CONTRACTOR shall maintain all thermoplastic placed under the terms of the Contract for a period of three (3) years.

END OF SECTION
RECLAIM BITUMINOUS CONCRETE PAVEMENT

PART 1.00 GENERAL

1.01 DESCRIPTION OF WORK

A. Provide scarifying, if necessary, and pulverizing of the existing bituminous concrete pavement material and gravel base to a minimum depth of nine inches (9") or at least two inches (2") below the pavement thickness as required or ordered by the OWNER.

1.02 QUALITY ASSURANCE

A. Standards shall be the VTRANS Standard Specifications for Construction.

1.03 JOB CONDITIONS

A. Weather limitations shall be as indicated in VTRANS "Standard Specifications".

B. Reclaim pavements under reasonably dry conditions to prevent siltation.

1.04 EQUIPMENT

A. Equipment required for this Section must have the capability of changing forward speed and the depth of cut; be equipped with four-wheel drive; perform in forward and reverse; have a cutting rotor with a minimum width of 8"; capable of cutting and pulverizing in both the up and down directions; and have a minimum capability of pulverizing to a minimum depth of 12".

PART 2.00 PRODUCTS

2.01 GENERAL

A. The reclaimed material shall consist of the pulverized existing pavement and blended with the underlying gravel base with additional crushed gravel, as determined by the Contract Monitors.

B. The pavement depths may vary along the length of the roadways of the Project.
C. Reclaim material shall conform to the following gradation of finished materials:

<table>
<thead>
<tr>
<th>Sieve Size</th>
<th>Percent Passing By Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>3&quot;</td>
<td>100</td>
</tr>
<tr>
<td>1-1/2&quot;</td>
<td>80-100</td>
</tr>
<tr>
<td>3/4&quot;</td>
<td>55-90</td>
</tr>
<tr>
<td>#4</td>
<td>40-70</td>
</tr>
<tr>
<td>#200</td>
<td>3-10</td>
</tr>
<tr>
<td></td>
<td>(Total Sample)</td>
</tr>
</tbody>
</table>

D. Conform to Section 02223- Roadway Excavation, Backfill, and Compaction, 2.01 E. and VTRANS "Standard Specifications" for additional crushed gravel gradation.

E. Conform to VTRANS "Standard Specifications" for liquid calcium chloride (CaCl₂).

F. Gradation shall be determined by AASHTO T164.

PART 3.00 EXECUTION

3.01 PREPARATION

A. Lower or remove all utility castings, if necessary, prior to the start of any work. Protect specific utilities to assure access to water mains, gravity sewers, storm drainage and any other utility during construction.

B. The limits of pavement reclamation are generally from pavement edge to pavement edge or as directed by the Contract Monitors. The CONTRACTOR will furnish controls to govern grading and crowning the reclaimed materials within the required limits.

C. Pulverize or scarify pavements and base gravel to provide a reasonably consistent reclaimed material.

D. Process reclaimed pavement using scarifying or planing mill equipment, a traveling rotary hammermill or other alternate reclaimer equipment. Rock crushers shall not be allowed as alternate equipment.

E. Care should be exercised to save all pavement materials for reclaiming, if trenches are constructed prior to the reclaiming process.
3.02 RECLAIM PROCESS

A. The Owners reserve the right to determine the method to be used based on conditions presented during the initial pass of the reclaim machinery.

3.02.1 METHOD A – SUITABLE SUBBASE

A. The reclaim process shall consist of two (2) passes with the reclaim machinery. During the second reclaim pass, liquid calcium chloride (CaCl₂) shall be applied at a rate of 0.25 gallon per square yard. The reclaim material shall then be fine graded and compacted. After the finish grade has been established, a final application of liquid calcium shall be made at a rate of 0.25 gallons per square yard.

B. Blend in existing driveway aprons using excess reclaimed materials and or additional gravel as needed.

C. Excess reclaimed materials, if any, shall remain the property of the OWNER. The OWNER will direct the CONTRACTOR on the storage location.

3.02.2 METHOD B – UNSUITABLE SUBBASE

A. The reclaim process shall consist of one (1) pass with the reclaim machinery. The reclaim material shall then be graded and compacted by the Town of Hartford.

B. Town of Hartford shall place 6" of 1 ½" crushed gravel subbase over the reclaimed pavement, grade to provide a 2% crown and compact. After fine grading to finish grade has been completed, Town of Hartford shall apply an application of liquid calcium chloride shall be made at a rate of 0.25 gallons per square yard.

C. Town of Hartford shall blend in existing driveway aprons with 1 ½" crushed gravel as needed or as determined by the Contract Monitors.

3.02.3 METHOD C – RECLAIM PAVEMENT ONLY

A. The reclaim process shall consist of the removal, disposal, and cleanup of road pavements by cold planing.

B. The equipment shall consist of a power operated planing machine or grinder capable of accurately establishing profile grades by referencing from both the existing pavement and from an independent grade control, and shall have a positive means of controlling cross slope elevations. The planer is to have sufficient weight to perform all types of planing without lifting. Sufficient and positive down pressure is to be provided on the drum assembly at all times when planing. The cutting shall be maintained so that the depth of the cut is within a tolerance of 1/8" throughout the
width of the head. The equipment shall also have an effective means of preventing dust from escaping into the air.

C. The bituminous surface shall be removed to the depth, width, grade, and typical cross-section as directed by the OWNER. No variation from the typical cross-section of more than 1/8" will be allowed. Any bituminous surfaces adjacent to objects such as scuppers, expansion joints, drop inlets, manholes, valves, and curbs which are inaccessible to the cold planer shall be removed by means of other approved equipment.

D. Excess reclaimed materials shall remain the property of the OWNER. The CONTRACTOR is responsible for removing the material and for the delivery to storage location designated by the OWNER. All dust and other remaining material shall be immediately removed with a power vacuum sweeper to the satisfaction of the OWNER. The resulting surface shall be left in a condition to receive an emulsion tack coat prior to resurfacing.

3.02.4 METHOD D – SUITABLE SUBBASE

A. The reclaim process shall consist of one (1) pass with the reclaim machinery. The reclaim material will be fine graded and compacted by Contractor. After the finish grade has been established, an application of liquid calcium shall be made at a rate of 0.50 gallons per square yard.

B. Blend in existing driveway aprons using excess reclaimed materials and or additional gravel as needed.

C. Excess reclaimed materials, if any, shall remain the property of the OWNER. The OWNER will direct the CONTRACTOR on the storage location.

3.03 COMPACTION

A. Conform to the requirements of the VTRANS "Standard Specifications" and Section 02223 - Roadway Excavation, Backfill, and Compaction.

END OF SECTION