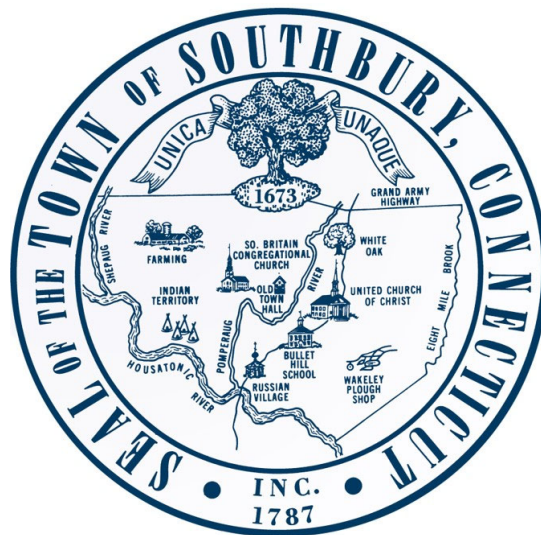


TOWN OF SOUTHBURY, CONNECTICUT

CONTRACT DOCUMENTS

For

Replacement of Bridge No. 130-009
Old Field Road over
Bullet Hill Brook



February 24, 2025

Affirmative Action/Equal Opportunity Employer
Minority/Women Business Enterprises are encouraged to apply

CONSULTING ENGINEERS

CARDINAL
ENGINEERING ASSOCIATES

180 Research Parkway
Meriden, Connecticut 06450

TABLE OF CONTENTS

BID FORMS AND CONTRACT DOCUMENTS

ADVERTISEMENT FOR BIDS

INFORMATION TO BIDDERS

PAGE

1. Use of Separate Bid Forms	1
2. Interpretations or Addenda	1
3. Inspection of Site	1
4. Alternative Bids	1
5. Bids	1
6. Bid Guaranty	2
7. Collusive Agreements	3
8. Statement of Bidders Qualifications	3
9. Unit Prices	3
10. Corrections	4
11. Time for Receiving Bids	4
12. Opening of Bids	4
13. Withdrawal of Bids	4
14. Award of Contract: Rejection of Bids	4
15. Execution of Agreement: Performance, Labor and Material Bond	5
16. Notice to Proceed	5
17. Wages and Salaries	5
18. Equal Employment Opportunities	6
19. Taxes	6
20. Allowances	6
21. State Set-Aside and Contract Compliance Requirements	7
22. Non-Discrimination and Affirmative Action Provisions	7
23. Time for Commencement and Completion and Liquidated Damages	9

PROPOSAL

PAGE

1. Contractor's Check List	11
2. Bid Proposal Pages	13-20
3. Bid Bond, Certificate as to Corporate Principal and Form of Surety Guaranty	21-25
4. Non-Collusion Affidavit of Prime Bidder	26-27
5. Affirmative Action Program Certification	28
6. Statement of Bidder's Qualifications	29-33
7. CHRO – Bidders Contract Compliance Monitoring Report	35-39
8. Contractor's Wage Certification Form	41-42
9. Indemnification Certificate	43

10. Code of Ethics/Conflict of Interest Ordinance	44-50
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FORMS

PAGE

1. Agreement	51-53
2. Town of Southbury Certification	54
3. Performance Bond	55-56
4. Payment Bond	57-58
5. Acknowledgment of Surety Company	59
6. Certification of Non-Arrearage	60
7. Certificate of Waiver and Release of Claims	61-62
8. Contractor's Final Payment Release/Affidavit	63-64
9. Statement of Surety Company	65
10. Maintenance Bond	66-67
11. Notice of Award / Acceptance	68-69
12. Notice to Proceed	70
13. Change Order Form	71

SPECIAL PROVISIONS

PAGE

Contract Time and Liquidated Damages	73
Notice to Contractor – Applicability of Connecticut DOT – Form 819	74
Notice to Contractor – Potential Modified Award Schedule (Permits)	74
Notice to Contractor – Prequalification Requirement	74
Notice to Contractor – Bid Rejection	74
Notice to Contractor – Procurement of Materials	74
Notice to Contractor – Supervision and Inspection	74
Notice to Contractor – Municipal Project/Field Office	74
Notice to Contractor – Pre-Construction Meeting	75
Notice to Contractor – Verification of Existing Conditions	75
Notice to Contractor – Unanticipated Discovery of Cultural Resources	75
Notice to Contractor – Flood Contingency Plan Requirements	75
Notice to Contractor – No Storage or Staging of Materials Within Floodplain Without Review and Written Approval	75
Notice to Contractor – Noise Pollution	76
Notice to Contractor - Call Before You Dig	76
Notice to Contractor – Protection of Existing Overhead Utilities	76
Notice to Contractor – Work Near Overhead Utilities	77
Notice to Contractor – Utility Coordination	77
Notice to Contractor – Utility Relocations	78
Notice to Contractor – Project Specific Testing Requirements	79
Notice to Contractor – Contractor Training Requirement for 10 Hour OSHA Construction Safety and Health Course	79
Notice to Contractor – Endangered Species – Northern Long Eared Bat	80
Notice to Contractor – Time of Year Restrictions	81
Notice to Contractor – Supplement to Best Management Practices	81

SPECIAL PROVISIONS (continued)PAGE

Section 1.01 – Definitions of Terms and Permissible Abbreviations	83
Section 1.02 – Proposal Requirements and Conditions	85-86
Section 1.03 – Award and Execution of Contract	87
Section 1.04 – Scope of Work	89
Section 1.05 – Control of the Work	91-92
Section 1.06 – Control of Materials	93
Section 1.07 – Legal Relations and Responsibilities	95-96
Section 1.08 – Prosecution and Progress	97
Section 1.09 – Measurement and Payment	99-100
Section 1.10 – Environmental Compliance	101
Section 1.11 – Claims	103
Division II – Construction Details	105
0201001A Clearing and Grubbing	107
0202000A Earth Excavation	109
0202216A Excavation and Reuse of Existing Channel Bottom Material	11-113
0202219A Supplemental Streambed Channel Material	115-116
0204151A Handling Water	117
0210303A Turbidity Control Curtains	119-120
0212000A Subbase	121
0214100A Compacted Granular Fill	123
0304002A Processed Aggregate Base	125
0406171A HMA S0.50	127
0406172A HMA S0.375	127
0406173A HMA S0.25	127
0406303A Sawing and Sealing Joints	129-133
0503866A Removal of Existing Culvert	135
0601062A Footing Concrete	137-138
0601064A Abutment and Wall Concrete	137-138
0601121A Headwall Concrete	137-138
0601088A Concrete Form Liners	139-143
0601125A Precast Concrete Box Culvert	145-152
0703031A Rock Weir	153-154
0707009A Membrane Waterproofing (Cold Liquid Elastomeric)	155-161
0819002A Penetrating Sealer Protective Compound	163-165
0904990A Metal Bridge Rail	167-169
0952051A Control and Removal of Invasive Vegetation	171-175
0969060A Construction Field Office, Small	177-183
0971001A Maintenance and Protection of Traffic	185-195
0974001A Removal of Existing Masonry	197
1204210A Furnish and Install Project Sign	199-202
1700005A Testing	203

APPENDICES

APPENDIX A – Wage Rates

APPENDIX B – Permits

LEGAL NOTICE
ADVERTISEMENT FOR BIDS

REPLACEMENT OF BRIDGE No. 130-009
OLD FIELD ROAD BRIDGE OVER BULLET HILL BROOK
SOUTHURY, CONNECTICUT
STATE PROJECT No. 9130-009

The Town of Southbury, Connecticut is seeking sealed bids for furnishing all labor, tools, materials, and equipment required for the Replacement of Bridge No. 130-009 Old Field Road over Bullet Hill Brook. Bids will be received by the First Selectman's Office, Town Hall, 501 Main Street South, Southbury, Connecticut 06488 until 10:00 A.M., local time, on Friday, March 21, 2025 at which time the bids will be publicly opened and read.

An optional pre-bid meeting with potential bidders will be held at the project location on Thursday, March 13 at 9:00 a.m.

Plans and Specifications for the above project may be examined and/or obtained at Advanced Reprographics, 50 Corporate Avenue, Plainville, CT 06062, (860) 410-1020, www.advancedrepro.net. Prospective bidders should access the "Planroom" on the website and go to the "Public Jobs" area, no log in information is necessary. Plans and specifications may be picked up at the Advanced Reprographics office. Plans and specifications may also be ordered by calling the Advanced Reprographics number listed above. Bidders are responsible for all printing costs and shipping costs, as applicable. Project Documents will be available at noon, Monday, February 24, 2025

CONTRACTOR SHALL BE PRE-QUALIFIED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION FOR GROUP NO. 8 – MINOR BRIDGES CONSTRUCTION OR GROUP NO. 8A – BOX CULVERTS.

Form 819 Standard Specifications and Supplemental Specifications may be obtained via the Connecticut Department of Transportation's website: <https://portal.ct.gov/DOT/IT/ConnDOT-Publications-Manuals>. All Proposals must be on the form furnished by the Town of Southbury and must be requested for the above-named project.

Each Bidder must deposit with his/her bid a certified check, or a bid bond, for not less than five percent (5%) of the bid as provided in the Information for Bidders. A certified check will not be accepted in lieu of a Bid Bond. **NO PROPOSAL WILL BE ACCEPTED UNLESS ACCOMPANIED BY THE REQUIRED BID BOND.** The Town reserves the right to waive any informality or to reject any or all bids should it be in the Town's best interest to do so. The Contractor chosen for the project shall be required to furnish 100 % Performance and Labor and Material bonds and proof of required insurance coverage. A Maintenance Bond, in the amount of ten percent (10%) of the contract sum shall be required after completion of the work and prior to final payment.

THIS CONTRACT IS SUBJECT TO STATE SET-ASIDE AND CONTRACT COMPLIANCE REQUIREMENTS

The attention of the Bidders is called to the requirement for minimum wage rates to be paid under this Contract.

The right is reserved to reject any or all bids in whole or in part, to award any item, group of items, or total bid and to waive any informality or technical defects, if it is deemed to be in the best interest of the Town of Southbury.

No Bidder may withdraw their bid within ninety (90) days after the actual date of the opening thereof.

CONTRACTORS that find discrepancies and/or errors in or between plans, specifications, quantities and other matters, must immediately notify Gary Giroux, Cardinal Engineering Associates, Inc., 180 Research Parkway, Meriden, CT 06450 or at gary@cardinal-engineering.com in writing not less than Seven days before the scheduled bid opening.

Date: _____

Town of Southbury

INFORMATION TO BIDDERS

1. USE OF SEPARATE BID FORMS

These Contract Documents include a complete set of bidding and agreement forms, which are for the convenience of Bidders and are not to be detached from the Contract Documents, filled out, or executed;

Separate copies of the Bid package are included by way of an Insert

2. INTERPRETATIONS OR ADDENDA

No oral interpretation will be made to any bidder as to the meaning of the Contract Documents or any part thereof. Every request for such an interpretation shall be made in writing to Cardinal Engineering Associates, Inc., 180 Research Parkway, Meriden, Connecticut 06450 with carbon copy to the Town Engineer. Any inquiry received seven (7) or more days prior to the date fixed for opening of bids will be given consideration. Every interpretation made to Bidders will be in the form of an Addendum to the Contract Documents and, when issued, will be on file at the Public Works Department at least five (5) days before Bids are opened. In addition, all Addenda will be mailed and/or faxed to each person to whom Contract Documents have been issued, but it shall be the Bidder's responsibility to make inquiry as to, and to obtain, the Addenda issued, if any. All such Addenda shall become part of the Contract and each Bidder shall be bound by such Addenda, whether or not received by the Bidder.

3. INSPECTION OF SITE

Each Bidder shall visit the site of the proposed work and fully acquaint itself with the existing conditions there relating to construction and labor and should fully inform itself as to the facilities involved, the difficulties and restrictions attending the performance of the Contract. The Bidder shall thoroughly examine and familiarize itself with the Drawings, Technical Specifications and all other Contract Documents. The bidders shall also examine all records on file with the Town of Southbury, "Call Before You Dig" and State Authorities regarding the Project, and the areas within the Project limits, so as to be apprised of all subsurface conditions and other relevant information. The Contractor, by the execution of the Contract, shall in no way be relieved of any obligation under it due to the failure to receive or examine any form or legal instrument or to visit the site and acquaint itself with the conditions there existing and the Town of Southbury will reject any claim based on the facts regarding which it should have been on notice.

4. ALTERNATE BIDS

No alternate bids will be considered unless alternate bids are specifically requested.

5. BIDS

a.) Each bid must be submitted on the prescribed, separately bound bid forms. All blank spaces must be filled in as noted in ink. Bids must give the prices proposed both in words and figures and no changes shall be made in the forms or in the items mentioned therein. Erasure and other changes in the bid must be explained or noted over the initials of the bidder. In the event of any discrepancy between the written amounts and the figures, the written amounts shall govern.

b.) The Bidder shall sign the bid in the blank space provided for this purpose. If the bid is made by a partnership or corporation, the name and address of the partnership or corporation shall be indicated, together with the names and addresses of the partners or officers. If the bid is made by a partnership, it must be acknowledged by one of the partners; if made by a corporation, by one of the officers.

Bidders shall furnish with their bids the following:

1. Bid Bond, Certificate as to Corporate Principal and Form of Surety Guaranty
2. Non-Collusion Affidavit of Prime Bidder (including notification of outstanding financial and other obligations to the Town of Southbury)
3. Affirmative Action Certification
4. Statement of Bidder's Qualifications
5. CHRO – Bidder Contract Compliance Monitoring Report
6. Contractor's Wage Certification Form
7. Evidence of Pre-Qualification by the Connecticut Department of Transportation for Group No. 8 – Minor Bridge Construction or Group No. 8A – Box Culverts.

The information required under (1) to (6), inclusive, shall be furnished on the forms included in the separately bound Bid Insert and shall be subject to all requirements of the General Conditions, Special Conditions and the Specifications and Drawings.

c.) The successful Bidder is specifically advised that he/she, and any person, firm or other party to whom it is proposed to award a subcontract under this Contract, must submit a letter regarding compliance with the Equal Employment Opportunity requirements included in this Project. Approval of the contractor/subcontractor award cannot be given by the Owner unless and until the proposed contractor/subcontractor has submitted the certification and/or other evidence that it has fully complied with any reporting requirements to which it is or was subject.

Although the Bidder is not required to attach such certification of compliance to its bid, the Bidder is herein advised of this requirement so that appropriate action can be taken to prevent subsequent delay in contract and subcontract awards.

d.) The Owner will consider informal any bid not prepared and submitted in accordance with the provisions hereof and may, at its option, waive any informalities/irregularities or accept or reject any and all bids. Any bid received after the time, date and place specified shall not be considered. No Bidder may withdraw a bid within ninety (90) days after the actual date of the opening thereof.

6. **BID GUARANTY**

a.) The bid must be accompanied by a bid guaranty, which shall not be less than specified in the Advertisement for Bids. At the option of the Bidder, the guaranty may be a certified check, bank draft, negotiable U.S. Government Bond (at par value) or a bid bond in the form attached.

The bid bond shall be secured by a guaranty or Surety Company authorized and qualified to do business in the State of Connecticut and listed in the latest issue of the U.S. Treasury Circular 570. The amount of such bid bond shall be within the maximum amount specified for such

company in said Circular 570. Bids will be considered non-responsive unless accompanied by the required guaranty. Certified check or bank draft must be made payable to the order of the Town of Southbury. Cash deposits will not be accepted. The bid guaranty shall insure the execution of the Agreement and the furnishing of the surety bond or bonds by the successful Bidder, all as required by the Contract Documents.

b.) Revised bids submitted before the opening of the bids, whether forwarded by mail or telegram, if representing an increase in excess of two percent (2%) of the original bid, must have the bid guaranty adjusted accordingly; otherwise the Bid will not be considered.

c.) Certified checks or bank drafts, or the amount thereof, bid bonds and negotiable U.S. Government bonds of successful Bidders, will be returned as soon as practicable after the opening of the bids.

7. COLLUSIVE AGREEMENT

a.) Each Bidder submitting a bid to the Town of Southbury for any portion of the work contemplated by the documents on which bidding is based, shall execute, and attach thereto, an affidavit substantially in the form herein provided to the effect that it has not colluded with any other person, firm or corporation in regard to any bid submitted.

b.) Before executing any subcontract, the successful Bidder shall submit the name of any proposed subcontractor for prior approval and an affidavit substantially in the form herein provided in the section SUBCONTRACTS under the General Conditions.

8. STATEMENT OF BIDDER'S QUALIFICATIONS

Each Bidder shall, as noted in the Bid Package, submit on the form furnished for that purpose (a copy of which is included in the Contract Documents), a statement of the Bidder's qualifications, its experience record in constructing the type of improvements embraced in the Contract and its organization and equipment available for the work contemplated; and, when specifically requested by the Town, shall also submit a detailed financial statement. The Town shall have the right to take such steps as it deems necessary to determine the ability of the Bidder to perform the obligations under the Contract and the Bidder shall furnish the Town all such information and data for this purpose as it may request. The right is reserved to reject any bid where an investigation of the available evidence or information does not satisfy the Town that the Bidder is qualified to carry out properly the terms of the Contract.

9. UNIT PRICES

The unit prices for each of the several items in the proposal of each Bidder shall include the pro rata share of overhead, so that the sum of the products obtained by multiplying the quantity shown for each item by the unit price represents the total bid. Any bid not conforming to this requirement may be rejected as informal. The special attention of all Bidders is called to this provision for, should conditions make it necessary to revise the quantities, increase or decrease thereof may be made without limit and adjustment and compensation shall be made on the basis of the unit prices for such items.

10. CORRECTIONS

Erasures or other changes in the Bids must be noted over the signature of the Bidder.

11. TIME FOR RECEIVING BIDS

a.) Bids received prior to the advertised hour of opening will be kept securely sealed. The officer whose duty it is to open them will decide when the specified time has arrived and no bid received thereafter will be considered, except that, when a bid arrives in the mail after the time fixed for opening, but before the reading of all other bids is completed, and it is shown to the satisfaction of the Town that the non-arrival on time was due solely to delay in the mails for which the Bidder was not responsible, such bid will be received and considered.

b.) Bidders are cautioned that, while facsimile modification of bids may be received as provided above, such modifications, if not explicit and it in any sense subject to misrepresentations, shall make the bid so modified or amended, subject to rejection.

12. OPENING OF BIDS

At the time and place fixed for the opening of bids, the Town will cause to be opened and publicly read aloud every bid received within the time set for receiving bids, irrespective of any irregularities therein. Bidders and other persons properly interested may be present, in person or by a representative.

After the bid opening, the Town or Engineer shall evaluate each submitted bid for conformance to the bid submittal requirements and check each Bid Proposal for errors and agreement between unit prices in numbers and written words.

13. WITHDRAWAL OF BIDS

Bids may be withdrawn on written or facsimile request dispatched by the Bidder and received by the Town of Southbury in time for the bid opening; provided that the written confirmation of any facsimile withdrawal over the signature of the Bidder shall be placed in the mail and postmarked prior to the time set for bid opening. The bid guaranty of any Bidder withdrawing their bid in accordance with the foregoing conditions will be returned promptly.

14. AWARD OF CONTRACT; REJECTION OF BIDS

a.) The Contract will be awarded within ninety (90) days after the date of the bid opening to the responsible Bidder submitting the lowest bid complying with the conditions of the Advertisement for Bids. The Bidder to whom the award is made will be notified at the earliest possible date. The Town, however, reserves the right to reject any and all bids or to waive any informality in submitted bid documents whenever such rejection or waiver is in its interest.

b.) The Town reserves the right to consider as unqualified to do the work required by these Contract Documents any Bidder who does not habitually perform with their own forces the major portion of the work involved in construction of the improvements in these Contract Documents.

c.) The ability of any Bidder to obtain a performance bond will not be regarded as the sole test of such Bidder's competency or responsibility.

d.) The Town will not award the Contract to any Contractor who is, at the time of the award, ineligible for such Contract under the provisions of any applicable regulations issued by the Secretary of Labor, United States Department of Labor, or is not qualified under applicable State and local laws and regulations.

e.) If the Contract is awarded, it will be awarded by the Town to a responsible Bidder on the basis of the lowest Base Bid. The Contract will require the completion of work in accordance with the Contract Documents.

15. EXECUTION OF AGREEMENT, PERFORMANCE, LABOR AND MATERIAL BOND

a.) Subsequent to the notice of award and within ten (10) days after the prescribed forms are presented for signature, the successful Bidder shall execute and deliver, to the Town, the Agreement in the form included in the Contract Documents in such number of copies as the Town shall require.

b.) Having satisfied all conditions of award, as set forth elsewhere in these documents, the successful Bidder shall, within the period specified in Paragraph "a." above, furnish a surety bond in a penal sum not less than the amount of the Contract as awarded, as security for the faithful performance of the Contract and a labor and material bond for payment of all persons, firms or corporations to whom the Contractor may become legally indebted for labor, materials, tools, equipment or services of any nature, including utility and transportation services, employed or used by him in performing the work. Such bonds shall be in the same form as those included in the Contract Documents and shall bear the same date or a date subsequent to that of the Agreement. These bonds shall be signed and issued by a guaranty or surety company satisfactory to the Town, authorized and qualified to do business in the State of Connecticut and listed in the latest issue of the U.S. Treasury Circular 570 and the penal sum of any such bond shall be within the maximum specified for such company in said Circular 570. The current Power of Attorney for the person who signs for any surety company shall be attached to such bonds.

c.) The failure of the successful Bidder to execute such agreement and to supply the required bonds or submit the insurance policies required in the section INSURANCE of the GENERAL CONDITIONS within ten (10) days after the prescribed forms are presented for signature, or within such extended period as the Town grants, based upon reasons determined sufficient by the Town, shall constitute a default and the Bidder's bid bond or guaranty shall be forfeited to the Town of Southbury as liquidated damages. The Town may either award the Contract to the next lowest responsible Bidder or re-advertise for bids and may charge against the defaulting Bidder the difference between the amount of the bid and the amount for which a Contract for the work is subsequently executed, irrespective of whether the favorable bid is received by re-advertising, the defaulting Bidder shall have no claim against the Town for a refund.

16. NOTICE TO PROCEED

A notice to proceed will be issued by the Town of Southbury within thirty (30) calendar days after the execution of the Contract by the Town or the deposition of the required bonds and insurance policies, whichever is last.

17. WAGES AND SALARIES

a.) Attention of the Bidders is particularly directed to the requirements concerning the

payment of not less than the prevailing wage and salary rates specified in the Contract Documents and the classification of employees.

b.) The rate of pay set forth in the Contract Documents are the minimum to be paid during the life of the contract. It is, therefore, the responsibility of the Bidders to inform themselves as to local labor conditions, such as the length of work day and the work week, overtime compensation, health and welfare contributions, labor supply and prospective changes and adjustments of rates.

18. EQUAL EMPLOYMENT OPPORTUNITY

Attention of the Bidders is particularly called to the requirements for insuring that employees and applicants for employment are not discriminated against because of their race, creed, color or national origin or physical handicap.

19. TAXES

Bids should not include federal excise or state sales taxes (State Sales Tax exempt under Connecticut General State Statute Sec. 12-412 (1) as the Town is exempt from payment of any such taxes). The Town is also exempt from transportation taxes when goods are consigned to the Town. Tax exemption certificates will be furnished by the Supervisory Auditor-Accounts Payable upon satisfactory proof of delivery to the Town. Shipments should be consigned to the Town in care of the Contractor.

20. ALLOWANCES

The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Town may direct, but the Contractor shall not be required to employ persons or entities against which the Contractor makes reasonable objection.

Unless otherwise provided in the Contract Documents:

- a). Materials and equipment under an allowance shall be selected promptly by the Town to avoid delay in the Work;
- b). Allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- c). Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses contemplated for stated allowance amounts shall be included in the allowances; and
- d). Whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order.

21. STATE SET-ASIDE AND CONTRACT COMPLIANCE REQUIREMENTS

The Contractor who is selected to perform this State project must comply with CONN. GEN. STAT. §§ 4a-60, 4a-60a, 4a-60g, and 46a-68b through 46a-68f, inclusive, as amended by June 2015 Special Session Public Act 15-5. An Affirmative Action Plan must be filed with and approved by the Commission on Human Rights and Opportunities prior to the commencement of construction.

State law requires a minimum of twenty-five (25%) percent of the state-funded portion (50%) of the Contract for award to subcontractors holding current certification from the Connecticut Department of Administrative Services (“DAS”) under the provisions of CONN. GEN. STAT. § 4a-60g, as amended. (25% of the work with DAS certified Small and Minority owned businesses and 25% of that work with DAS certified Minority, Woman and/or Disabled owned businesses.) The Contractor must demonstrate good faith effort to meet the 25% set-aside goals.

For municipal public works contracts and quasi-public agency projects, the Contractor must file a written or electronic non-discrimination certification with the Commission on Human Rights and Opportunities. Forms can be found at the following address:

<https://portal.ct.gov/OPM/Fin-PSA/Forms/Nondiscrimination-Certification>

22. NON-DISCRIMINATION AND AFFIRMATIVE ACTION PROVISIONS

(A)(1) The Contractor agrees and warrants that in the performance of the Contract such Contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, sexual orientation, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such Contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the state of Connecticut. The Contractor further agrees to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such Contractor that such disability prevents performance of the work involved; (2) the Contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, to state that it is an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the commission; (3) the Contractor agrees to provide each labor union or representative of workers with which such Contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such Contractor has a contract or understanding, a notice to be provided by the commission advising the labor union or workers' representative of the Contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment; (4) the Contractor agrees to comply with each provision of this section and sections 46a-68e and 46a-68f and with each regulation or relevant order issued by said commission pursuant to sections 46a-56, 46a-68e, 46a-68f and 46a-86; (5) the Contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the commission, and permit access to

pertinent books, records and accounts, concerning the employment practices and procedures of the Contractor as relate to the provisions of this section and section 46a-56.

(B) Any Contractor who is a party to a municipal public works contract or quasi-public agency project, where any such contract is valued at less than \$50,000 for each year of the contract, shall provide the Commission on Human Rights and Opportunities with a written or electronic representation that complies with the nondiscrimination agreement and warranty under subsection (A)(1) above, provided if there is any change in such representation, the Contractor shall provide the updated representation to the Commission not later than 30 days after such change. Any Contractor who is a party to a municipal public works contract or a quasi-public agency project, where any such contract is valued at \$50,000 or more for any year of the contract, shall provide the Commission with any one of the following: (1) Documentation in the form of a company or corporate policy adopted by resolution of the board of directors, shareholder, managers, members or other governing body of such Contractor that complies with the nondiscrimination agreement and warranty under subsection (A)(1) of this section; (2) Documentation in the form of a company or corporate policy adopted by a prior resolution of the board of directors, shareholders, managers, members or other governing body of such contractor if (a) the prior resolution is certified by a duly authorized corporate officer of such contractor to be in effect on the date the documentation is submitted, and the executive director of the Commission on Human Rights and Opportunities or designee certifies that the prior resolution complies with the nondiscrimination agreement and warranty under subdivision (A)(1) of this section; or (3) Documentation in the form of an affidavit signed under penalty of false statement by a chief executive officer, president, chairperson or other corporate officer duly authorized to adopt company or corporate policy that certifies that the company or corporate policy of the contractor complies with the nondiscrimination agreement and warranty under subdivision (A)(1) of this section and is in effect on the date the affidavit is signed..

(C) If the Contract is a municipal public works contract or a quasi-public agency project, the Contractor agrees and warrants that s/he will make good faith efforts to employ minority business enterprises as subcontractors and suppliers of materials on such public works project. The Contractor shall include the provisions of subdivision (A)(1) of this section in every subcontract or purchase order entered into to fulfill any obligation of a municipal public works contract or contract for a quasi-public agency project, and such provisions shall be binding on a subcontractor, vendor or manufacturer, unless exempted by regulations or orders of the Commission on Human Rights and Opportunities. The Contractor shall take such action with respect to any such subcontract or purchase order as the Commission may direct as a means of enforcing such provisions, including sanctions for noncompliance in accordance with section 46a-56; provided, if such Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Commission regarding a state contract, the contractor may request the state of Connecticut to enter into any such litigation or negotiation prior thereto to protect the interests of the state and the state may so enter.

(D) "Minority business enterprise" means any small contractor or supplier of materials fifty-one per cent or more of the capital stock, if any, or assets of which is owned by a person or persons: (1) Who are active in the daily affairs of the enterprise, (2) who have the power to direct the management and policies of the enterprise and (3) who are members of a minority, as such term is defined in subsection (a) of section 32-9n; and "good faith" means that degree of

diligence which a reasonable person would exercise in the performance of legal duties and obligations. "Good faith efforts" shall include, but not be limited to, those reasonable initial efforts necessary to comply with statutory or regulatory requirements and additional or substituted efforts when it is determined that such initial efforts will not be sufficient to comply with such requirements. Determination of the Contractor's good faith efforts shall include, but shall not be eliminated to, the following factors: The contractor's employment and subcontracting policies, patterns and practices; affirmative advertising recruitment and training; technical assistance activities and such other reasonable activities or efforts as the Commission on Human Rights and Opportunities may prescribe that are designed to ensure the participation of minority business enterprises in municipal public works contracts or quasi-public agency projects. "Municipal public works project" means that portion of an agreement entered into on or after October 1, 2015, between any individual, firm or corporation and a municipality for the construction, rehabilitation, conversion, extension, demolition or repair of a public building, highway or other changes or improvements in real property, which is financed in whole or in part by the state, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees but excluding any project of an alliance district, as defined in section 10-262u, finance by the state funding in an amount equal to fifty thousand dollars or less. "Quasi-public agency project" means the construction, rehabilitation, conversion, extension, demolition or repair of a building or other changes or improvements in real property pursuant to a contract entered into on or after October 1, 2015, which is financed in whole or in part by a quasi-public agency using state funds, including, but not limited to, matching expenditures, grants, loans, insurance or guarantees.

23. TIME FOR COMMENCEMENT AND COMPLETION AND LIQUIDATED DAMAGES

The Contractor shall commence work under this Contract within ten (10) days of the date of "Notice to Proceed" issued by the Town of Southbury and shall fully complete all work stipulated in these Contract Documents within 150 consecutive calendar days thereafter.

It is mutually agreed that, if the Contractor fails to complete all or a portion of its work within the time stipulated in the Contract Documents, the Owner will be damaged; and because the amount of the Owner's damages is difficult, if not impossible, to definitely ascertain and prove, it is hereby agreed that the amount of such damages shall be as follows: (1) One Thousand – Two Hundred Dollars (\$1,200.00) per day as liquidated damages for each and every day of delay in the completion of the work in accordance with the Contract Documents.

The Contractor agrees that said liquidated damages shall be deducted from monies due the Contractor under the Contract, or, if no money is due the Contractor, the Contractor hereby agrees to pay to the Owner as liquidated damages, and not by way of penalty, such total sum as shall be due for such delay.

TOWN OF SOUTHBURY
CONTRACTOR'S CHECK LIST

PROJECT: REPLACEMENT OF OLD FIELD ROAD BRIDGE OVER BULLET HILL
BROOK (BRIDGE No. 130-009)

The following forms are required for submittal for the above referenced bid and shall be submitted with the bid proposal pages by the time and date specified. This checklist is provided for the Bidder's use and shall not be required for submittal.

The following forms shall be submitted in duplicate.

FORM DESCRIPTION

1. BID PROPOSAL PAGES
2. BID BOND
3. CERTIFICATE AS TO CORPORATE PRINCIPAL
4. FORM OF SURETY GUARANTY
5. NON-COLLUSION AFFIDAVIT OF PRIME BIDDER/PROPOSER
6. AFFIRMATIVE ACTION PROGRAM CERTIFICATION
7. STATEMENT OF BIDDER'S QUALIFICATIONS
8. CHRO – BIDDER CONTRACT COMPLIANCE MONITORING REPORT
9. CONTRACTOR'S WAGE CERTIFICATION FORM
10. EVIDENCE OF CTDOT PRE-QUALIFICATION (GROUP No. 8 – MINOR BRIDGES OR GROUP No. 8A – BOX CULVERTS))

BID

TOWN OF SOUTHURY, CONNECTICUT

**REPLACEMENT OF OLD FIELD ROAD BRIDGE
OVER BULLET HILL BROOK
(BRIDGE No. 130-009)**

Bid Submitted by:

Company Name	
Street Address	
City, State and Zip Code	
Contact	
()	()
Telephone #	Fax #

Jeff Manville
First Selectman
Town Hall, 501 Main Street South
Southbury, Connecticut 06488

Dear Mr. Manville:

The undersigned, having familiarized themselves with the existing conditions of the Project area affecting the cost of the work and with the Contract Documents (which includes Advertisement For Bids, Bid Form, Bid Bond, Instructions to Bidders, Non-Collusion Affidavit, Addenda, General Conditions, Special Conditions, Technical Specifications, Drawings as listed in the Schedule of Drawings and form of Surety Bond or Bonds as prepared by the Town of Southbury and on file at the First Selectman's Office, Town Hall, 501 Main Street South, Southbury, Connecticut 06488, hereby proposes to furnish all machinery, tools, appurtenances, equipment and services, including utility and transportation services required to construct and complete the work, all in accordance with the above listed Documents and submits, herewith, in conformity with the Project Manual and subsequent addenda, the following bid:

BID PROPOSAL
REPLACEMENT OF BRIDGE NO. 130-009
OLD FIELD ROAD OVER BULLET HILL BROOK
SOUTHBURY, CONNECTICUT

ITEM No			Brief Description: Unit or Lump Sum Bid (in both words and figures)	Est Quantity	Ext. Total in Figures
1	0201001	A	CLEARING AND GRUBBING THE LUMP SUM PRICE OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	LS	\$ _____
2	0202000	A	EARTH EXCAVATION THE PRICE PER CUBIC YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	990	\$ _____
3	0202216	A	EXCAVATION AND REUSE OF EXISTING CHANNEL BOTTOM MATERIAL THE PRICE PER CUBIC YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	130	\$ _____
4	0202219	A	SUPPLEMENTAL STREAMBED CHANNEL MATERIAL THE PRICE PER CUBIC YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	14	\$ _____
5	0202529		CUT BITUMINOUS CONCRETE PAVEMENT THE PRICE PER LINEAR FOOT OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	75	\$ _____
6	0203202		STRUCTURE EXCAVATION-EARTH (EXCLUDING COFFERDAM AND DEWATERING) THE PRICE PER CUBIC YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	900	\$ _____
7	0203304		STRUCTURE EXCAVATION-ROCK (EXCLUDING COFFERDAM AND DEWATERING) THE PRICE PER CUBIC YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	60	\$ _____
8	0204001		COFFERDAM AND DEWATERING THE PRICE PER LINEAR FOOT OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	280	\$ _____
9	0204151	A	HANDLING WATER THE LUMP SUM PRICE OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	LS	\$ _____
10	0209001		FORMATION OF SUBGRADE THE PRICE PER SQUARE YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	960	\$ _____
11	0210303	A	TURBIDITY CONTROL CURTAINS THE LUMP SUM PRICE OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	LS	\$ _____

BID PROPOSAL
REPLACEMENT OF BRIDGE NO. 130-009
OLD FIELD ROAD OVER BULLET HILL BROOK
SOUTHBURY, CONNECTICUT

ITEM No		Brief Description: Unit or Lump Sum Bid (in both words and figures)	Est Quantity	Ext. Total in Figures
12	0212000	A SUBBASE THE PRICE PER CUBIC YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	300	\$ _____
13	0214100	A COMPACTED GRANULAR FILL THE PRICE PER CUBIC YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	100	\$ _____
14	0216000	PERVIOUS STRUCTURE BACKFILL THE PRICE PER CUBIC YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	690	\$ _____
15	0219001	SEDIMENTATION CONTROL SYSTEM THE PRICE PER LINEAR FOOT OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	720	\$ _____
16	0304002	A PROCESSED AGGREGATE BASE THE PRICE PER CUBIC YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	130	\$ _____
17	0406171	A HMA S0.5 THE PRICE PER TON OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	110	\$ _____
18	0406172	A HMA S0.375 THE PRICE PER TON OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	110	\$ _____
19	0406173	A HMA S0.25 THE PRICE PER TON OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	5	\$ _____
20	0406303	A SAWING AND SEALING JOINTS THE PRICE PER LINEAR FOOT OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	60	\$ _____
21	0503866	A REMOVAL OF EXISTING CULVERT THE LUMP SUM PRICE OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	LS	\$ _____
22	0586001.10	TYPE 'C' CATCH BASIN - 0'-10' DEEP THE PRICE PER EACH OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	1	\$ _____

BID PROPOSAL
REPLACEMENT OF BRIDGE NO. 130-009
OLD FIELD ROAD OVER BULLET HILL BROOK
SOUTHBURY, CONNECTICUT

ITEM No	Brief Description: Unit or Lump Sum Bid (in both words and figures)	Est Quantity	Ext. Total in Figures
23 0586040.10	TYPE 'C-L' CATCH BASIN - 0'-10' DEEP THE PRICE PER EACH OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	2	\$ _____
24 0601062	A FOOTING CONCRETE THE PRICE PER CUBIC YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	93	\$ _____
25 0601064	A ABUTMENT AND WALL CONCRETE THE PRICE PER CUBIC YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	80	\$ _____
26 0601088	A CONCRETE FORM LINERS THE PRICE PER SQUARE FOOT OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	808	\$ _____
27 0601121	A HEADWALL CONCRETE THE PRICE PER CUBIC YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	7	\$ _____
28 0601125	A 20' X 9' PRECAST CONCRETE BOX CULVERT THE PRICE PER LINEAR FOOT OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	35	\$ _____
29 0601502	1/2" PREFORMED EXPANSION JOINT FILLER FOR BRIDGES THE PRICE PER SQUARE FOOT OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	150	\$ _____
30 0602030	DEFORMED STEEL BARS - GALVANIZED THE PRICE PER POUND OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	17900	\$ _____
31 0686000.18	18" R.C. PIPE - 0'-10' DEEP THE PRICE PER LINEAR FOOT OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	85	\$ _____
32 0686000.36	36" R.C. PIPE - 0'-10' DEEP THE PRICE PER LINEAR FOOT OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	113	\$ _____
33 0703011	INTERMEDIATE RIPRAP THE PRICE PER CUBIC YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	60	\$ _____

BID PROPOSAL
REPLACEMENT OF BRIDGE NO. 130-009
OLD FIELD ROAD OVER BULLET HILL BROOK
SOUTHURY, CONNECTICUT

ITEM No	Brief Description: Unit or Lump Sum Bid (in both words and figures)	Est Quantity	Ext. Total in Figures
34	0703031 a ROCK WEIR THE PRICE PER EACH OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	8	\$ _____
35	0707009 A MEMBRANE WATERPROOFING (COLD LIQUID ELASTOMERIC) THE PRICE PER SQUARE YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	86	\$ _____
36	0708001 DAMPPROOFING THE PRICE PER SQUARE YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	200	\$ _____
37	0755009 GEOTEXTILE THE PRICE PER SQUARE YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	330	\$ _____
38	0815001 BITUMINOUS CONCRETE LIP CURBING THE PRICE PER LINEAR FOOT OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	246	\$ _____
39	0819002 A PENETRATING SEALER PROTECTIVE COMPOUND THE PRICE PER SQUARE YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	30	\$ _____
40	0822001 TEMPORARY TRAFFIC BARRIER THE PRICE PER LINEAR FOOT OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	120	\$ _____
41	0904990 A METAL BRIDGE RAIL THE PRICE PER LINEAR FOOT OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	44	\$ _____
42	0921001 CONCRETE SIDEWALK THE PRICE PER SQUARE FOOT OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	1449	\$ _____
43	0922501 BITUMINOUS CONCRETE DRIVEWAY THE PRICE PER SQUARE YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	38	\$ _____
44	0922503 GRAVEL DRIVEWAY THE PRICE PER SQUARE YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	24	\$ _____

BID PROPOSAL
REPLACEMENT OF BRIDGE NO. 130-009
OLD FIELD ROAD OVER BULLET HILL BROOK
SOUTHURY, CONNECTICUT

ITEM No	Brief Description: Unit or Lump Sum Bid (in both words and figures)	Est Quantity	Ext. Total in Figures
45 0944000	FURNISHING AND PLACING TOPSOIL THE PRICE PER SQUARE YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	1150	\$ _____
46 0950005	TURF ESTABLISHMENT THE PRICE PER SQUARE YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	1150	\$ _____
47 0952051 A	CONTROL AND REMOVAL OF INVASIVE VEGETATION THE PRICE PER SQUARE YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	288	\$ _____
48 0969060 A	CONSTRUCTION FIELD OFFICE (SMALL) THE PRICE PER MONTH OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	6	\$ _____
49 0970006	TRAFFIC PERSON (MUNICIPAL POLICE OFFICER) THE ESTIMATED PRICE OF \$ SIX THOUSAND THREE HUNDRED DOLLARS AND NO _____ CENTS (\$ 6,300.00)	EST	\$ 6,300.00
50 0971001 A	MAINTENANCE AND PROTECTION OF TRAFFIC THE LUMP SUM PRICE OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	LS	\$ _____
51 0974001 A	REMOVAL OF EXISTING MASONRY THE PRICE PER CUBIC YARD OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	21	\$ _____
52 0975004	MOBILIZATION AND PROJECT CLOSEOUT THE LUMP SUM PRICE OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	LS	\$ _____
53 0976002	BARRICADE WARNING LIGHTS-HIGH INTENSITY THE PRICE PER DAY OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	1200	\$ _____
54 0978002	TRAFFIC DRUM THE PRICE PER EACH OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	12	\$ _____
55 0979003	CONSTRUCTION BARRICADE - TYPE III THE PRICE PER EACH OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	12	\$ _____

BID PROPOSAL
REPLACEMENT OF BRIDGE NO. 130-009
OLD FIELD ROAD OVER BULLET HILL BROOK
SOUTHURY, CONNECTICUT

ITEM No	Brief Description: Unit or Lump Sum Bid (in both words and figures)	Est Quantity	Ext. Total in Figures
56 0980020	CONSTRUCTION SURVEYING THE LUMP SUM PRICE OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	LS	\$ _____
57 0981100	42" TRAFFIC CONE THE PRICE PER EACH OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	12	\$ _____
58 1204210 A	FURNISH AND INSTALL PROJECT SIGN THE PRICE PER EACH OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	2	\$ _____
59 1209007	PAINTED PAVEMENT MARKING 4" YELLOW THE PRICE PER LINEAR FOOT OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	300	\$ _____
60 1220027	CONSTRUCTION SIGNS THE PRICE PER SQUARE FOOT OF \$ _____ DOLLARS AND _____ CENTS (\$ _____)	210	\$ _____
61 1700005 A	TESTING THE ESTIMATED COST OF \$ SEVEN THOUSAND FIVE HUNDRED DOLLARS AND NO _____ CENTS (\$ 7,500.00 _____)	EST	\$ 7,500.00

TOTAL BID:

DOLLARS

AND

CENTS

SUBMITTED BY:

(PRINTED NAME)

(TITLE)

(SIGNATURE)

(DATE)

It is understood and agreed that the written Unit Prices bid for the quantities of work in the various items of work shall control the Contract award and that the quantities noted are approximate (estimated only for use in comparing bids); and that the sum obtained by multiplying the Unit Prices by the estimated quantities and, also, the total of these sums are inserted for the purpose of checking this Bid and for the convenience of the Bidder. The Unit Prices are to be paid for the actual quantities of the several classes of work in the completed work or structures.

Should quantities be less than those shown for the Unit Prices, only lesser, actual quantities will be allowed in calculating cost.

Notice to Bidders:

The Bidder's attention is called to Section 9 of the "Instructions to Bidders" regarding the significance of the as-bid unit prices for this Project.

The Bidder understands, by signing this Bid that the Town of Southbury shall REJECT any bid that has unit prices, which are, in the opinion of the Purchasing Agent, obviously unbalanced. The Bidder is required to calculate the value of the various bid items on the basis of reasonable labor, material, equipment, pro rata profit and pro rata overhead costs to perform the work described in the Contract Documents.

In submitting this Bid, the Bidder understands that the Town of Southbury reserves the right to reject any and all bids, or to waive any informality in the submitted bid documents. The Bidder also understands that the Town of Southbury reserves the right to accept any, all, or none of the Alternates, which may be listed above and may accept Alternates in any order at the Town's sole discretion. The Bidder agrees to perform the work of each accepted Alternate for the sum quoted for each and to include such accepted Alternates in the Contract for construction.

If written notice of the acceptance of this Bid and any or all of the Alternates is mailed, telegraphed or otherwise delivered to the undersigned within ninety (90) days after the opening of the Bid, or at any time thereafter before the Bid is withdrawn, the undersigned agrees to execute and deliver any Contract in the prescribed form and furnish the required bonds within ten (10) days after the Contract is presented to them for signature.

Bid Bond:

The undersigned herewith submits security equal to five percent (5%) of the Base Bid, the sum of:

_____ Dollars and No Cents

(\$_____)

This security shall be the sole and exclusive property of the Town of Southbury as liquidated damages to the Town, if the undersigned fails to execute a Contract in conformity with the accompanying forms, after due date notification therefore in the Contract Documents.

Other Conditions:

Attached hereto is an affidavit in proof that the undersigned has not colluded with any person with respect to this Bid, or any other bid, or in the submitting of this Bid.

The Bidder is enclosing a statement of their qualifications and is prepared to submit a financial statement upon request.

The acceptance of subcontractors shall rest with the Town and their decision shall be final.

Addenda:

The bidder hereby acknowledges receipt of the following Addenda. (Include signed copies of addenda with bid submittal)

Addendum Number	Date Received	Signature

Bidder's Official Name and Address:		
Company Name: _____		
Street Address _____		
City, State and Zip Code: _____		
Contact: _____		
Signature _____	Title _____	Date _____

BID BOND

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

(Name of Principal)

as PRINCIPAL, and _____

as SURETY are held and firmly bound unto the Town of Southbury hereinafter called the "Town",

in the penal sum of _____ Dollars (\$_____)

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

THE CONDITIONS OF THE OBLIGATIONS IS SUCH THAT whereas the Principal has submitted the accompanying bid dated _____, 2025 for REPLACEMENT OF BRIDGE NO. 130-009 OLD FIELD ROAD OVER BULLET HILL BROOK.

NOW THEREFORE, if the Principal shall not withdraw said bid within the period specified therein after the opening of same or if no period be specified within 180 days after the said opening and shall within the period specified therefore, or, if no period be specified within 10 days after the prescribed forms are presented to him for signature, enter into a written Contract with the Town of Southbury in accordance with the bid as accepted and give bond with good and sufficient surety or sureties, as may be required for the faithful performance and proper fulfillment of such contract, or in the event of the withdrawal of said bid within the period specified, or the failure to enter into such Contract and give such bond within the time specified, if the Principal shall pay the Town of Southbury the difference between the amount specified in said Bid and the amount for which the Town of Southbury may procure the required work or supplies or both, if the latter amount be in excess of the former, than the above obligations shall be void and of no effect, otherwise to remain in full force and effect.

IN WITNESS WHEREOF, the above bounded parties have executed this instrument under their several seals this _____ day of _____, 2025, the name and Corporate Seal of each corporate party being hereto affixed and these presents duly signed by the undersigned representative pursuant to authority of the governing body.

For Sole Proprietor

(Seal)

In Presence of:

(Witness Signature)

(Individual Principal)

(Witness Signature)

(Business Address)

For Partnership:

In Presence of:

(Seal)

(Witness Signature)

(Partnership)

By: _____

(Witness Signature)

(Business Address)

For Corporation:

Attest:

(Corporate Principal)

(Business Address)

(Affix
Corporate
Seal)

By: _____

Attest:

(Corporate Surety)

(Business Address)

(Affix
Corporate
Seal)

Countersigned:

By: _____

By: _____

Attorney-in-Fact, State of _____

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____, certify that I am the Secretary of the Corporation named as Principal in the within bond, that _____ who signed the said bond on behalf of the Principal was then _____ of said Corporation; that I know the signature and the signature thereto is genuine and that said bond was duly signed, sealed and attested to for and in behalf of said Corporation by authority of the governing body.

(Title)

(Corporate
Seal)

(The Surety Company must append statement of their financial condition and a copy of the resolution authorizing the execution of bonds by officers of the company and the power-of-attorney of the surety company's attorney-in-fact, authorized to act within the State of Connecticut).

FORM OF SURETY GUARANTY

(To accompany Bid)

KNOW ALL MEN BY THESE PRESENTS, that for and in consideration of the sum of \$1.00, lawful money of the United States, the receipt whereof is hereby acknowledged, paid the undersigned corporation and for other valuable consideration, the

(Name of Surety Company)

a corporation organized and existing under the laws of the State of _____ and licensed to do business in the State of Connecticut, certified and agrees, that if Contract REPLACEMENT OF BRIDGE NO. 130-009 OLD FIELD ROAD OVER BULLET HILL BROOK is awarded to

_____, the undersigned Corporation will execute the
(Name of Bidder)
bond or bonds as required by the Contract Documents and will become Surety in the full amount of the Contract Price for the faithful performance of the Contract and for payment of all persons supplying labor or furnishing materials in connection thencewith.

(Surety)

(To be accompanied by the usual proof of authority of officers of surety company to execute the same).

TOWN OF SOUTHBURY, CONNECTICUT

NON-COLLUSION AFFIDAVIT OF PRIME BIDDER/PROPOSER
(Including notification of outstanding financial and other obligations to the Town of Southbury)

State of _____)
County of _____) ss:

_____, being first duly sworn, deposes and says that:

1. He/She is (owner, partner, officer, representative or agent) of _____
_____, the Bidder/Proposer that has submitted the attached
(Bidder/Proposer Name)
Bid/Proposal;
2. He/She is fully informed respecting the preparation and contents of the attached Bid/Proposal and of all pertinent circumstances respecting such Bid/Proposal;
3. Such Bid/Proposal is genuine and is not a Collusive or Sham Bid/Proposal;
4. Neither the said Bidder/Proposer, nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other bidder/proposer, firm or person to submit a collusive or sham Bid/Proposal in connection with the Contract for which the attached Bid/Proposal has been submitted or to refrain from bidding/proposing in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other bidder/proposer, firm or person to fix the price or prices in the attached Bid/Proposal of any other bidder, or to fix any overhead, profit or cost element of the bid/proposal prices or the Bid/Proposal price of any other bidder/proposer, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the Town of Southbury or any person interested in the proposed Contract;
5. The price or prices quoted in the attached Bid/Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the Bidder/Proposer or any of its agents, representatives, owners, employees or parties in interest, including this affiant; and
6. That no officer or employee or person whose salary is payable in whole or in part from the Town Treasury is directly or indirectly interested in the Bid/Proposal, or in the supplies, materials, equipment, work or labor to which it relates, or in any of the profits thereof.

7. **Check one:**

_____ That neither this Bidder/Proposer, nor any owner, partner, officer, representative, agent or affiliate of this Bidder/Proposer, has outstanding financial or other obligations to the Town of Southbury nor are they a party to any entity which has any such obligations.

_____ There are such outstanding obligations. (List all obligations on a separate sheet, indicate the nature of the obligation and the parties involved.)

8. That neither this Bidder/Proposer nor any owner, partner, officer, representative, agent or affiliate of this Bidder/Proposer, has failed to file a list of taxable personal property with the Town of Southbury as required by State law.

9. **Listing of owners, partners, officers, representatives, agents and/or affiliates**

Name	Title	Affiliated Company (if none, state NONE)
1.		
2.		
3.		
4.		
5.		
6.		
7.		

(Use additional sheet if necessary - must be on company letterhead and notarized)

(Signed) _____

(Title) _____

Subscribed and sworn to before me this _____ day of _____, 20_____.

_____ Title _____

My Commission Expires: _____

NOTE: THIS FORM MUST BE NOTARIZED

TO BE COMPLETED BY ORIGINATING DEPARTMENT

BID/PROPOSAL/AGREEMENT TITLE:	
DEPARTMENT:	
RETURN FORM TO:	
ADDRESS:	
ADDRESS:	

AFFIRMATIVE ACTION PROGRAM CERTIFICATION

City/Town of _____

FIRM NAME: _____

ADDRESS: _____

DESCRIPTION OF PROJECT _____

BID AMOUNT: \$ _____

DATE: _____

I (Name of Person) _____ of

the (Name of Firm) _____
intend

to honor our Affirmative Action Program on file with the Connecticut Department of Transportation, Office of Contract Compliance. I further certify that our Affirmative Action Program is current and that the last approval was on _____, 20 ____ and it expires on _____, 20 ____.

SIGNED BY: _____

TITLE: _____

EEO OFFICER

STATEMENT OF BIDDER'S QUALIFICATIONS

(To be submitted by the Bidder with the Bid)

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information they desire.

- 1. Name of Bidder: _____
- 2. Bidder's Tax Identification Number: _____
- 3. Permanent Main Office Address: _____
- 4. When Organized: _____
- 5. If a Corporation, where incorporated: _____ Date of Incorporation: _____
- 6. If other than a Corporation or Partnership, describe Organization and name Principals:

28 7. Number of years engaged in construction under present firm or trade name: _____ Number of years as General Contractor: _____

8. Contracts on hand:

<u>Project Name</u>	<u>Owner</u>	<u>Arch/Engr.</u>	<u>Contract Amount</u>	<u>Contract Date</u>	<u>Percent Complete</u>	<u>Scheduled Completion</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

9. General character of work performed by your firm:

10. Percent of work normally performed with your own forces:

<u>Trade</u>	<u>Percent</u>	<u>Trade</u>	<u>Percent</u>	<u>Trade</u>	<u>Percent</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

11. Have you ever failed to complete any work awarded to you? If so, where and why:

12. Have you ever defaulted on a Contract? If so, where and why:

13. List the more important contracts completed by you within the past 5 years:

<u>Project Name</u>	<u>Owner</u>	<u>Arch/Eng.</u>	<u>Contract Amount</u>	<u>Contract Date</u>	<u>Date Completed</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

14. List major equipment available for this Contract:

15. Experience in work similar in importance to this project:

16. Background and experience of the principal members of your organization, including the officers:

<u>Individual's Name</u>	<u>Construction Experience/Yrs.</u>	<u>Present Position Years Experience</u>	<u>Responsibility</u>	<u>Previous Position Years Experience</u>
--------------------------	-------------------------------------	--	-----------------------	---

17. Name and background of superintendent who will have principal on-site responsibility for this project:
- | <u>Individual's Name</u> | <u>Similar Project Experience</u> | <u>Dollar Value</u> | <u>Responsibility</u> |
|--------------------------|-----------------------------------|---------------------|-----------------------|
| | | | |
| | | | |
| | | | |
18. List States and Categories in which your Organization is legally qualified to do business:
-
-
-
19. Give bank and trade references:
- | <u>Bank</u> | <u>Trade</u> |
|-------------|--------------|
| | |
| | |
| | |
20. Name of Bonding and Insurance Companies and Names and Addresses of Agents:
-
-
-

21. Upon request by the Owner, the undersigned agrees to furnish, if being considered for award of Contract for the Project upon which a Bid Proposal has been submitted, within 48 hours after the Bid Opening, a current Statement of Financial Conditions, including Contractor's latest regular dated financial statement or balance sheet, which must contain the following items:

Current Assets: (Cash, joint venture accounts, accounts receivable, notes receivable, accrued interest on notes, deposits and materials and prepaid expenses), net fixed assets and other assets.

Current Liabilities: (Accounts payable, notes payable, accrued interest on notes, provision for income taxes, advances received from owners, accrued salaries, accrued payroll taxes), other liabilities and capital (capital stock, authorized and outstanding shares par values, earned surplus).

22. The undersigned hereby authorizes and requests any persons, firm, or corporation to furnish any information requested by the Town of Southbury in verification of the recitals comprising this statement of the Bidder's qualifications.

Dated at _____ this _____ day of _____, 20 _____

(Name of Bidder)

By: _____ Title: _____

State of _____) ss.

County of _____)

_____, being duly sworn, deposes and says that he/she is _____

of _____ and that he/she answers to the foregoing questions and all statements therein are true and correct.

Subscribed and sworn to before me this _____ day of _____, 20 _____

Notary Public
My Commission Expires:

COMMISSION ON HUMAN RIGHTS AND OPPORTUNITIES
CONTRACT COMPLIANCE REGULATIONS
NOTIFICATION TO BIDDERS

(Revised 09/3/15)

The contract to be awarded is subject to contract compliance requirements mandated by [Sections 4a-60](#) and [4a-60a](#) of the Connecticut General Statutes; and, when the awarding agency is the State, [Sections 46a-71\(d\)](#) and [46a-81i\(d\)](#) of the Connecticut General Statutes. There are Contract Compliance Regulations codified at [Section 46a-68j-21 through 43](#) of the Regulations of Connecticut State Agencies, which establish a procedure for awarding all contracts covered by [Sections 4a-60](#) and [46a-71\(d\)](#) of the Connecticut General Statutes.

According to [Section 46a-68j-30\(9\)](#) of the Contract Compliance Regulations, every agency awarding a contract subject to the contract compliance requirements has an obligation to “aggressively solicit the participation of legitimate minority business enterprises as bidders, contractors, subcontractors and suppliers of materials.” “Minority business enterprise” is defined in [Section 4a-60](#) of the Connecticut General Statutes as a business wherein fifty-one percent or more of the capital stock, or assets belong to a person or persons: “(1) Who are active in daily affairs of the enterprise; (2) who have the power to direct the management and policies of the enterprise; and (3) who are members of a minority, as such term is defined in subsection (a) of [Section 32-9n](#).” “Minority” groups are defined in [Section 32-9n](#) of the Connecticut General Statutes as “(1) Black Americans . . . (2) Hispanic Americans . . . (3) persons who have origins in the Iberian Peninsula . . . (4) Women . . . (5) Asian Pacific Americans and Pacific Islanders; (6) American Indians . . .” An individual with a disability is also a minority business enterprise as provided by [Section 4a-60g](#) of the Connecticut General Statutes. The above definitions apply to the contract compliance requirements by virtue of [Section 46a-68j-21\(11\)](#) of the Contract Compliance Regulations.

The awarding agency will consider the following factors when reviewing the bidder’s qualifications under the contract compliance requirements:

- (a) the bidder’s success in implementing an affirmative action plan;
- (b) the bidder’s success in developing an apprenticeship program complying with [Sections 46a-68-1 to 46a-68-17](#) of the Administrative Regulations of Connecticut State Agencies, inclusive;
- (c) the bidder’s promise to develop and implement a successful affirmative action plan;
- (d) the bidder’s submission of employment statistics contained in the “Employment Information Form”, indicating that the composition of its workforce is at or near parity when compared to the racial and sexual composition of the workforce in the relevant labor market area; and
- (e) the bidder’s promise to set aside a portion of the contract for legitimate minority business enterprises. [See Section 46a-68j-30\(10\)\(E\)](#) of the Contract Compliance Regulations.

INSTRUCTIONS AND OTHER INFORMATION

The following [BIDDER CONTRACT COMPLIANCE MONITORING REPORT](#) must be completed in full, signed, and submitted with the bid for this contract. The contract awarding agency and the Commission on Human Rights and Opportunities will use the information contained thereon to determine the bidders compliance to [Sections 4a-60](#) and [4a-60a](#) CONN. GEN. STAT., and [Sections 46a-68j-23](#) of the Regulations of Connecticut State Agencies regarding equal employment opportunity, and the bidder’s good faith efforts to include minority business enterprises as subcontractors and suppliers for the work of the contract.

1) **Definition of Small Contractor**

[Section 4a-60g](#) CONN. GEN. STAT. defines a small contractor as a company that has been doing business under the same management and control and has maintained its principal place of business in Connecticut for a one year period immediately prior to its application for certification under this section, had gross revenues not exceeding fifteen million dollars in the most recently completed fiscal year, and at least fifty-one percent of the ownership of which is held by a person or persons who are active in the daily affairs of the company, and have the power to direct the management and policies of the company, except that a nonprofit corporation shall be construed to be a small contractor if such nonprofit corporation meets the requirements of subparagraphs (A) and (B) of subdivision [4a-60g](#) CONN. GEN. STAT.

2) Description of Job Categories (as used in Part IV Bidder Employment Information) (Page 2)

MANAGEMENT: Managers plan, organize, direct, and control the major functions of an organization through subordinates who are at the managerial or supervisory level. They make policy decisions and set objectives for the company or departments. They are not usually directly involved in production or providing services. Examples include top executives, public relations managers, managers of operations specialties (such as financial, human resources, or purchasing managers), and construction and engineering managers.

BUSINESS AND FINANCIAL OPERATIONS: These occupations include managers and professionals who work with the financial aspects of the business. These occupations include accountants and auditors, purchasing agents, management analysts, labor relations specialists, and budget, credit, and financial analysts.

MARKETING AND SALES: Occupations related to the act or process of buying and selling products and/or services such as sales engineer, retail sales workers and sales representatives including wholesale.

LEGAL OCCUPATIONS: In-House Counsel who is charged with providing legal advice and services in regards to legal issues that may arise during the course of standard business practices. This category also includes assistive legal occupations such as paralegals, legal assistants.

COMPUTER SPECIALISTS: Professionals responsible for the computer operations within a company are grouped in this category. Examples of job titles in this category include computer programmers, software engineers, database administrators, computer scientists, systems analysts, and computer support specialists

ARCHITECTURE AND ENGINEERING: Occupations related to architecture, surveying, engineering, and drafting are included in this category. Some of the job titles in this category include electrical and electronic engineers, surveyors, architects, drafters, mechanical engineers, materials engineers, mapping technicians, and civil engineers.

OFFICE AND ADMINISTRATIVE SUPPORT: All clerical-type work is included in this category. These jobs involve the preparing, transcribing, and preserving of written communications and records; collecting accounts; gathering and distributing information; operating office machines and electronic data processing equipment; and distributing mail. Job titles listed in this category include telephone operators, bill and account collectors, customer service representatives, dispatchers, secretaries and administrative assistants, computer operators and clerks (such as payroll, shipping, stock, mail and file).

BUILDING AND GROUNDS CLEANING AND MAINTENANCE: This category includes occupations involving landscaping, housekeeping, and janitorial services. Job titles found in this category include supervisors of landscaping or housekeeping, janitors, maids, grounds maintenance workers, and pest control workers.

CONSTRUCTION AND EXTRACTION: This category includes construction trades and related occupations. Job titles found in this category include boilermakers, masons (all types), carpenters, construction laborers, electricians, plumbers (and related trades), roofers, sheet metal workers, elevator installers, hazardous materials removal workers, paperhangers, and painters. Paving, surfacing, and tamping equipment operators; drywall and ceiling tile installers; and carpet, floor and tile installers and finishers are also included in this category. First line supervisors, foremen, and helpers in these trades are also grouped in this category.

INSTALLATION, MAINTENANCE AND REPAIR: Occupations involving the installation, maintenance, and repair of equipment are included in this group. Examples of job titles found here are heating, ac, and refrigeration mechanics and installers; telecommunication line installers and repairers; heavy vehicle and mobile equipment service technicians and mechanics; small engine mechanics; security and fire alarm systems installers; electric/electronic repair, industrial, utility and transportation equipment; millwrights; riggers; and manufactured building and mobile home installers. First line supervisors, foremen, and helpers for these jobs are also included in the category.

MATERIAL MOVING WORKERS: The job titles included in this group are Crane and tower operators; dredge, excavating, and lading machine operators; hoist and winch operators; industrial truck and tractor operators; cleaners of vehicles and equipment; laborers and freight, stock, and material movers, hand; machine feeders and offbearers; packers and packagers, hand; pumping station operators; refuse and recyclable material collectors; and miscellaneous material moving workers.

PRODUCTION WORKERS: The job titles included in this category are chemical production machine setters, operators and tenders; crushing/grinding workers; cutting workers; inspectors, testers sorters, samplers, weighers; precious stone/metal workers; painting workers; cementing/gluing machine operators and tenders; etchers/engravers; molders, shapers and casters except for metal and plastic; and production workers.

3) Definition of Racial and Ethnic Terms (as used in Part IV Bidder Employment Information) (Page 3)

<p><u>White</u> (not of Hispanic Origin)-All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.</p> <p><u>Black</u> (not of Hispanic Origin)-All persons having origins in any of the Black racial groups of Africa.</p> <p><u>Hispanic</u>- All persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.</p>	<p><u>Asian or Pacific Islander</u>- All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes China, India, Japan, Korea, the Philippine Islands, and Samoa.</p> <p><u>American Indian or Alaskan Native</u>- All persons having origins in any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.</p>
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BIDDER CONTRACT COMPLIANCE MONITORING REPORT

PART 1 – Bidder Information

<p>Company Name: Street Address: City & State: Chief Executive:</p>	<p>Bidder Federal Employer Identification Number: Or Social Security Number:</p>
<p>Major Business Activity: (brief description)</p>	<p>Bidder Identification (response optional/definitions on page 1)</p> <p>-Bidder is a small contractor? Yes No -Bidder is a minority business enterprise? Yes No (If yes, check ownership category) Black Hispanic Asian American American Indian/Alaskan Native Iberian Peninsula Individual(s) with a Physical Disability Female -Bidder is certified as above by State of CT? Yes No</p>
<p>Bidder Parent Company: (If any)</p>	
<p>Other Locations in CT: (If any)</p>	

PART II - Bidder Nondiscrimination Policies and Procedures

<p>1. Does your company have a written Affirmative Action/Equal Employment Opportunity statement posted on company bulletin boards? Yes No</p>	<p>7. Do all of your company contracts and purchase orders contain non-discrimination statements as required by Sections 4a-60 & 4a-60a Conn. Gen. Stat.? Yes No</p>
<p>2. Does your company have the state-mandated sexual harassment prevention in the workplace policy posted on company bulletin boards? Yes No</p>	<p>8. Do you, upon request, provide reasonable accommodation to employees, or applicants for employment, who have physical or mental disability? Yes No</p>
<p>3. Do you notify all recruitment sources in writing of your company's Affirmative Action/Equal Employment Opportunity employment policy? Yes No</p>	<p>9. Does your company have a mandatory retirement age for all employees? Yes No</p>
<p>4. Do your company advertisements contain a written statement that you are an Affirmative Action/Equal Opportunity Employer? Yes No</p>	<p>10. If your company has 50 or more employees, have you provided at least two (2) hours of sexual harassment training to all of your supervisors? Yes No N/A</p>
<p>5. Do you notify the Ct. State Employment Service of all employment openings with your company? Yes No</p>	<p>11. If your company has apprenticeship programs, do they meet the Affirmative Action/Equal Employment Opportunity requirements of the apprenticeship standards of the Ct. Dept. of Labor? Yes No N/A</p>
<p>6. Does your company have a collective bargaining agreement with workers? Yes No</p> <p>6a. If yes, do the collective bargaining agreements contain non-discrimination clauses covering all workers? Yes No</p> <p>6b. Have you notified each union in writing of your commitments under the nondiscrimination requirements of contracts with the state of CT? Yes No</p>	<p>12. Does your company have a written affirmative action Plan? Yes No If no, please explain.</p> <p>13. Is there a person in your company who is responsible for equal employment opportunity? Yes No If yes, give name and phone number:</p>

1. Will the work of this contract include subcontractors or suppliers? Yes No

1a. If yes, please list all subcontractors and suppliers and report if they are a small contractor and/or a minority business enterprise. (defined on page 1 / use additional sheet if necessary)

1b. Will the work of this contract require additional subcontractors or suppliers other than those identified in 1a. above? Yes No

PART IV - Bidder Employment Information

Date:

JOB CATEGORY*	OVERALL TOTALS	WHITE (not of Hispanic origin)		BLACK (not of Hispanic origin)		HISPANIC		ASIAN or PACIFIC ISLANDER		AMERICAN INDIAN or ALASKAN NATIVE	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Management											
Business & Financial Ops											
Marketing & Sales											
Legal Occupations											
Computer Specialists											
Architecture/Engineering											
Office & Admin Support											
Bldg/ Grounds Cleaning/Maintenance											
Construction & Extraction											
Installation , Maintenance & Repair											
Material Moving Workers											
Production Occupations											
TOTALS ABOVE											
Total One Year Ago											
FORMAL ON THE JOB TRAINEES (ENTER FIGURES FOR THE SAME CATEGORIES AS ARE SHOWN ABOVE)											
Apprentices											
Trainees											

*NOTE: JOB CATEGORIES CAN BE CHANGED OR ADDED TO (EX. SALES CAN BE ADDED OR REPLACE A CATEGORY NOT USED IN YOUR COMPANY)

1. Which of the following recruitment sources are used by you? (Check yes or no, and report percent used)				2. Check (X) any of the below listed requirements that you use as a hiring qualification (X)		3. Describe below any other practices or actions that you take which show that you hire, train, and promote employees without discrimination
SOURCE	YES	NO	% of applicants provided by source			
State Employment Service					Work Experience	
Private Employment Agencies					Ability to Speak or Write English	
Schools and Colleges					Written Tests	
Newspaper Advertisement					High School Diploma	
Walk Ins					College Degree	
Present Employees					Union Membership	
Labor Organizations					Personal Recommendation	
Minority/Community Organizations					Height or Weight	
Others (please identify)					Car Ownership	
					Arrest Record	
					Wage Garnishments	

Certification (Read this form and check your statements on it CAREFULLY before signing). I certify that the statements made by me on this BIDDER CONTRACT COMPLIANCE MONITORING REPORT are complete and true to the best of my knowledge and belief, and are made in good faith. I understand that if I knowingly make any misstatements of facts, I am subject to be declared in non-compliance with Section 4a-60, 4a-60a, and related sections of the CONN. GEN. STAT.

(Signature)	(Title)	(Date Signed)	(Telephone)
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**STATE OF CONNECTICUT
LABOR DEPARTMENT**

REGULATION OF WAGES DIVISION

CONTRACTOR'S WAGE CERTIFICATION FORM

I, _____ of
(Officer, Owner, Authorized Rep. Company Name)

Do hereby certify that the firm of

Company Name

and all of its subcontractors will pay all workmen on the:

REPLACEMENT OF BRIDGE NO. 130-009
OLD FIELD ROAD OVER BULLET HILL BROOK

The wages as listed in the schedule of prevailing rates required for such Project (a copy of which is attached hereto).

(Signature) (Date)

Subscribed and sworn to before me this _____ day of _____, 20_____.

Notary Public

My Commission Expires: _____

Prevailing Wage Rates for this Project are attached in Appendix A.

***It is the responsibility of the Contractor, before bid opening, to request, if necessary, any additional information on State Wage Rates for those trades people who are not covered by the applicable State Wage Determination, but who may be employed for the proposed work under this Contract.**

The successful bidder must submit satisfactory proof of insurance and a signed Indemnification Certificate.

INDEMNIFICATION CERTIFICATE

To the fullest extent permitted by law, the contractor shall indemnify and hold harmless the Town of Southbury, and agents and employees of said Town from and against claims, damages, losses and expenses, including but not limited to attorney's fees, arising out of or resulting from performance of the work, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) including loss or use resulting therefrom, but only to the extent caused in whole or in part by acts or omissions of the contractor, a subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder.

Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to the Town of Southbury. In claims against any person or entity indemnified under this paragraph by an employee of the contractor, a subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under this paragraph shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the contractor or a subcontractor under workers' or workmen's compensation acts, disability benefits acts or other employee benefits acts.

CONTRACTOR

BY:

Authorized Signature & Title

Address

Date

CODE OF ETHICS/CONFLICT OF INTEREST ORDINANCE

The Town of Southbury has recently adopted a Code of Ethics/Conflict of Interest Ordinance. The Contractor shall comply with all applicable provisions of said Ordinance. The Contractor acknowledges receiving a copy of said Ordinance, a copy of which is attached hereto and made a part hereof. The Contractor further agrees that any instance of its violating any provisions of the Code of Ethics/Conflict of Interest Ordinance will be sufficient cause for the Town to terminate any or all of the Contractor's contracts or pending contracts with the Town. The Contractor agrees that the above clause will also be incorporated in all of its contracts with its subcontractors and consultants.

ACKNOWLEDGEMENT OF RECEIPT

I have read the above Code of Ethics/Conflict of Interest Ordinance and agree to abide by its terms. (Shown below)

ORDINANCE RECEIVED BY:

_____ (Print name)

_____ (Signature)

_____ (Date)

Code of Ethics/Conflict of Interest Ordinance

A. Declaration of Policy.

1. The proper operation of the government of the Town of Southbury requires that public officers, employees, and members of boards, commissions and committees be independent, impartial and responsible to the people; that governmental decisions and policies be made in the proper channels of the government structure and free from coercive or other improper influence; that public office and employment not be used for personal gain; and that the public have confidence in the integrity of its government.

2. The purpose of this Ordinance is to set forth standards of ethical conduct to assist public officers, employees, members of boards, commissions and committees and persons dealing with them, when they are in the performance of their duties, so as to maintain and enhance a tradition of responsible and effective public service.

3. In the interest of ensuring that concerns regarding possible conflict of interests are promptly raised, this Ordinance permits a concern that a conflict of interest may exist to be raised by any person, regardless of whether the person would be considered an aggrieved party as that term is interpreted under Connecticut law. Any failure to observe the procedures set forth in this Ordinance shall not, however, afford a basis for an action for damages against the Town, any Town board, commission, agency or employee, or any member of any Town board or commission, or for challenging a decision, license, permit or other action of a Town employee, board or commission or member of same by a person who would not, but for the provisions of this Ordinance, have standing to bring such an action.

B. Definitions.

The following definitions shall apply to this Ordinance:

1. **Conflict of Interest.** A conflict of interest shall be deemed to exist if any Town officer, employee, or member of any board or commission has a financial or personal interest, direct or indirect, in any purchase, contract, transaction, or decision involving his office, board, commission or employment. Indirect interest is defined as an interest in which an officer, member or employee might influence a decision or event so as to achieve gain, financial or otherwise, on behalf of a family member, friend or associate or that creates an actual or perceived monetary or personal indebtedness to any party.

2. **Financial Interest.** A financial interest shall be deemed to exist if:

a. Any such officer, member or employee might, directly or indirectly, derive pecuniary or financial gain or suffer loss from any purchase, contract, transaction or decision involving his office, board, commission or employment; or

b. A business or professional enterprise in which such officer, employee or member has any interest as an owner, member, partner, officer, employee or stockholder or has any other form of participation that will be affected by the outcome of the matter under consideration.

3. Personal Interest. A personal interest shall be deemed to exist if any such officer, member or employee shall have an interest with a person involved in any such contract, transaction or decision by reason of:

a. Relationship within the fourth degree by blood or marriage; or

b. Close business relationship; or

c. An interest that is averse to the interests of the Town with respect to the matter under consideration.

4. Material Conflict of Interest. A conflict of interest shall be deemed to be material where a reasonable person would conclude that the financial or personal interest:

a. is incompatible, or would to a reasonable person appear to be incompatible, with the proper discharge of official duties; or

b. would tend to impair, or would to a reasonable person appear to impair, independence of judgment and action in the performance of official duties.

5. Public Official. An elected or appointed official, whether paid or unpaid, full or part-time, of the Town.

6. Ethics Commission. The Town of Southbury Commission on Ethics as authorized by Section 7-148h of the Connecticut General Statutes.

C. Disclosure of Conflict.

1. Any Town officer, employee, or member of any Town board or commission who has a conflict or potential conflict of interest as defined herein, whether or not such conflict or potential conflict is material, shall disclose the interest causing such conflict or potential conflict in writing to the Board of Selectmen.

2. Any member of any Town board or commission who has a conflict of interest, whether or not such conflict is material, shall, in addition to the disclosure required by this Ordinance, disclose the interest causing such conflict to such board or commission, and such disclosure shall be recorded in the board's or commission's minutes.

D. Determination of Materiality.

1. In the event that a disclosure or a claim of a conflict of interest with respect to any Town officer or employee has been made to the Board of Selectmen, and the officer or employee does not disqualify himself from matters with respect to which the conflict of interest allegedly exists, the Board of Selectmen promptly shall inquire into the facts of the matter and determine whether or not a conflict exists and if so, whether it is material.

2. In the event that a disclosure or a claim or a conflict of interest with respect to any member of a Town board or commission has been made to such board or commission, and the member does not disqualify himself from matters with respect to which the conflict of interest allegedly exists, the board or commission shall forthwith determine by a majority of those members present, excluding the member whose interest is in question, whether or not a conflict exists and, if so, whether it is material.

E. Disqualification.

If it has been determined that a material conflict of interest exists, the Town officer, employee or member of any Town board or commission who has the conflict shall be disqualified from discussing or acting upon any matter encompassed by that conflict of interest, and shall leave the room during any public hearing, discussions or deliberations regarding the matter. Any Town officer, employee or member of any Town board or commission may disqualify himself even though the conflict of interest is not material.

F. Claim of Conflict.

If a formal written complaint is made to the Ethics Commission that any Town officer, employee, or member of any Town board or commission has an undisclosed conflict of interest, the Ethics Commission shall record the claim in its minutes.

G. Gifts and Favors.

No Town officer, employee, or member of any Town board or commission shall accept or receive, directly or indirectly, anything of value (whether by rebate, gift, promise, obligation or contract for future reward or Compensation or otherwise) for awarding or influencing the award of any decision, permit, license, contract or purchase order by the Town. Anything of value when in the form of a gift shall not be deemed relevant if the actual cost of that item is less than \$10.00.

H. Representation.

1. Without the prior written consent of the Ethics Commission, no Town employee or public official shall appear for Compensation before any Town board or agency in which he/she was formerly employed or served as an official at any time within a period of one (1) year after termination of his/her service with the Town.

2. Without the prior written consent of the Ethics Commission, no present or former Town employee or public official shall represent anyone other than the Town concerning any particular matter in which he/she participated personally and substantially while in municipal service.

3. No Town employee or public official shall disclose or use confidential information acquired in the course of and by reason of his/her official duties, for personal and/or financial gain for himself/herself or others.

4. No former Town employee or public official who participated substantially in the negotiation or award of municipal contract or who supervised the negotiation or award of such a contract shall accept employment with a party to the contract other than the Town for a period of one (1) year after such contract is signed.

I. Independent Contractors.

Before hiring any consultant, independent Contractor or other advisor, the officer, employee, board or commission that proposes to hire the independent Contractor shall inquire whether the independent Contractor has any conflict of interest as that term is defined in this Ordinance or as defined in any code of ethics or similar code applicable to the independent Contractor. Any such conflict shall be specified in the appropriate Town records (such as minutes of any relevant board or commission). Prior to hiring any independent contractor with a conflict, the officer, employee, board or commission proposing to hire the independent Contractor must make a determination that the conflict is not material and/or that despite the conflict, the independent Contractor should be hired. The decision and the reasons therefore must be a matter of public record.

No consultant, independent Contractor or other advisor of the Town shall represent a private interest in any action or proceeding against the interest of the Town which is in conflict with the performance of his/her duties as such consultant, independent Contractor or advisor. No consultant, independent Contractor or advisor may represent anyone other than the Town concerning any matter in which he/she participated personally and substantially as a consultant to the Town. Neither shall such consultant, independent Contractor or advisor disclose confidential information learned while performing his/her duties for the Town, nor shall he/she use such information for the personal and/or financial interests of himself/herself or others.

J. Procedure.

All claims pertaining to a violation of this Ordinance shall be made, in writing, to the Ethics Commission in accordance with the rules and regulations promulgated by that Commission which shall be found in the Town of Southbury Ethics Commission Statement of Procedures. These rules shall require the Complainant to specify the facts that gave rise to his/her claim and the specific provision of this Ordinance that has been breached on a Form provided by the Ethics Commission. The Ethics Commission may, but is not required to consider claims made

against individuals formerly in office or formerly employed.

Any allegations and any information learned, supplied to or received from or by the Ethics Commission shall remain confidential until a finding of Probable Cause is determined by the Ethics Commission.

The Ethics Commission is authorized to issue advisory opinions at its discretion.

K. Penalties.

1. In addition to any penalty contained in any other provision of law, any person who violates any of the provisions of this Ordinance may be censured or reprimanded or may be suspended or removed from office or employment, as the case may be, in the manner provided by law.

2. Any violation of this Ordinance shall render any purchase, contract, or transaction or any part thereof affected thereby voidable by the Board or Selectmen.

3. Any violation of this Ordinance with respect to any decision of a board, commission or committee shall be subject to any remedies deemed proper by the Board of Selectmen and permitted by law.

4 The penalties provided above are in addition to any other penalties provided by law to address violations of the provisions of this Ordinance.

L. Concurrent Offices.

1. No official or employee of the Town, full or part-time, shall serve on any board or commission to which the official or employee reports or acts as staff, except as otherwise stated in the Town Charter or Ordinances. Notwithstanding the foregoing, an official or employee may serve on any board, commission or committee in an advisory capacity.

2. Except as otherwise provided in the Charter or by Ordinance, the First Selectman, the Selectmen, the Town Clerk, members of the Board of Finance and members of the Ethics Commission shall hold no other Town office, and the provisions of Section 9-210 of the General Statutes concerning incompatible Town offices shall apply to the officers described therein.

3. Subject to the restrictions set forth in applicable law and in Section L. 2 of this Ordinance, nothing in this Ordinance shall prevent the appointment of the same person to more than one office, provided the offices are not incompatible, provided the duties of the offices to which he is appointed may, in the opinion of the Board of Selectmen, be satisfactorily fulfilled by one person, and provided further that inability to fulfill satisfactorily the duties of all offices to which he is appointed shall be cause for removal from any one or more of said offices.

M. Meetings.

1. **Members Attendance.** Members of all boards, commissions and committees are expected to attend all meetings of such boards, commissions and committees.
2. **Alternates' Attendance.** Alternate members of all boards, commissions and committees are expected to attend all meetings of such boards, commissions and committees.
3. **Voting.** All members or seated alternates of all boards, commissions and committees who have not been disqualified shall vote on all matters upon which a vote is held by such board, commission and committee unless there shall be reasonable cause for abstention and said cause is stated and recorded in the minutes of the meeting.
4. **Statement of Reasons.** In every case where the action of any board, commission and committee is subject to a right of appeal to another administrative body or to the courts of the State of Connecticut, a statement of the reasons for its action shall be included in the minutes of the meeting.

N. Indemnification Certificate:

The successful bidder must submit satisfactory proof of insurance and a signed Indemnification Certificate.

AGREEMENT

THIS AGREEMENT, made this _____ day of _____, 20____, by and between the TOWN OF SOUTHBURY, hereinafter called the "OWNER", acting through its BOARD OF SELECTMAN, and, _____ (a corporation) of _____, County of _____ and State of _____, hereinafter called the "CONTRACTOR".

WITNESSETH THAT: for in consideration of the payments and agreement hereinafter mentioned, to be made and performed by the OWNER, the CONTRACTOR hereby agrees with the OWNER to commence and complete the construction described as follows:

REPLACEMENT OF BRIDGE NO. 130-009 OLD FIELD ROAD OVER BULLET HILL BROOK, addenda thereto, dated _____, being nos. _____ as further described in the Proposal for Construction submitted by the CONTRACTOR, dated _____ and all documents included therein by reference; hereinafter called the "Project" for the sum of _____ (\$_____) and all extra work in connection therewith, under the terms as stated in the General, Special and Technical Conditions of the Contract, and at (his, her or their) own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurances and other accessories and services necessary to complete the said Project in accordance with the conditions and prices stated in the Contract.

The "Contract" shall consist of the following contract documents:

- a. The Advertisement for Bids.
- b. The Information for Bidders.
- c. Bid Proposal.
- d. The Contract Drawings (Plans), which include all maps, plates, prints and their drawings and printed or written explanatory matter thereof.
- e. The Contract Documents (including Notice to Contractor, Special Provisions, Permits) thereof as prepared by Cardinal Engineering Associates, Inc., with offices located at 180 Research Parkway, Meriden, Connecticut 06450 herein entitled the ENGINEER.

all of which, including all Addenda thereto, are made a part hereof and collectively evidence and constitute the Contract. If there is any inconsistency between the provisions of this Agreement and any of the other contract documents, the provisions of this Agreement shall prevail.

The CONTRACTOR hereby agrees to commence work under this Contract on or before a date to be specified in a written "Notice to Proceed" of the OWNER and to fully complete the Project within the time limit specified in the Special Conditions. The CONTRACTOR further agrees to pay, as liquidated damages, the sum as specified in the Special Conditions and as herein provided in the General Conditions.

The OWNER agrees to pay the CONTRACTOR in current funds for the performance of the Contract, subject to additions and deductions, as provided in the General Conditions of the Contract and to make payments on account thereof as provided in the General Conditions.

The CONTRACTOR shall indemnify and save harmless the OWNER and the ENGINEER as specified in the Special Conditions.

Any claim between the OWNER and CONTRACTOR, shall be resolved as follows:

Prior to the initiation of formal dispute resolution proceedings, the claiming party shall submit a written demand for a conference to be attended by those parties involved in the Project that are reasonably necessary for the resolution of the dispute. Such meeting shall be held within fifteen (15) days of the demand at the offices of the OWNER. Each party requested to attend this conference shall send an authorized representative who has authority to make decisions necessary to resolve the dispute.

If the conference fails to lead to a resolution of the claim or dispute, then the OWNER may submit a written demand to proceed to mediation and the OWNER and CONTRACTOR agree to participate in good faith in the mediation process. Mediation shall commence within forty-five (45) days of the initial demand to mediate and shall be arranged through the American Arbitration Association or any other recognized dispute resolution organization in the State of Connecticut. The costs of mediation (excluding individual legal fees) shall be shared equally.

In the event the OWNER does not elect to proceed to mediation, then all claims, counter-claims, disputes and other matters in question between the OWNER and CONTRACTOR arising out of this Contract or the breach thereof will be decided by arbitration or in a court of competent jurisdiction within the district in which the OWNER is located, as determined by the OWNER. In any such action, the prevailing party shall be entitled to recover its costs and reasonable fees of experts and attorneys.

Notwithstanding the existence of a dispute, the CONTRACTOR shall continue to carry on the Work and maintain the progress schedule set forth in the Contract unless the OWNER elects to terminate the Work in accordance with the Contract or the parties mutually agree in writing to suspend Work while the dispute is pending.

IN WITNESS WHEREOF, the parties to these presents have executed this Contract in three (3) counterparts, each of which shall be deemed an original, in the year and day first above mentioned.

OWNER: _____ (Corporate Seal)

BY: _____ TITLE:

ATTEST:

CONTRACTOR: _____ (Corporate Seal)

BY: _____ TITLE:

ATTEST:

CERTIFICATION

I, the undersigned, _____, the duly authorized
and acting legal representative of the TOWN OF SOUTHBURY, Connecticut

do hereby certify as follows:

I have examined the above Contract(s) and Surety Bonds and the manner of execution thereof, and I am of the opinion that each of the aforesaid Agreements has been duly executed by the proper parties thereto acting through their duly authorized representatives, have full power and authority to execute said Agreements on behalf the respective parties named thereon; and that the foregoing Agreements constitute valid and legally binding obligations upon the parties executing the same in accordance with the terms, conditions and provision thereof.

By _____

Date: _____

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

That we _____ a _____
(Name of Contractor) (Corporation, Partnership, Individual)

hereinafter called the "Principal" and _____
(Surety)

of _____ State of _____ hereinafter
called the "Surety", are held firmly bound unto the TOWN OF SOUTHBURY, Connecticut,
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, our heirs, executors, administrators and
successors, 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 _____, 20____, a copy of which is hereto attached and made a part hereof for the
construction of:

**REPLACEMENT OF BRIDGE NO. 130-009 OLD FIELD ROAD OVER BULLET HILL
BROOK.**

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 if it 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 there under of the specifications accompanying the same shall in any wise 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 Contractor or to work of the specifications.

PROVIDED, FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, who claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in three (3) counterparts, each one of which shall be deemed an original, this the _____ day of _____, 20__

ATTEST:

Principal

(Principal) Secretary

By: _____ (S)

(SEAL)

Address/Zip Code

Witness to Principal

ATTEST:

Surety

(Surety) Secretary

By: _____

(SEAL)

Attorney-in-Fact

Address/Zip Code

Witness to Surety

NOTE: Date of the Bond must not be prior to date of the Contract. If the Contractor is a Partnership, all Partners should execute the Bond.

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS:

That we _____ a _____
(Name of Contractor) (Corporation, Partnership, Individual)
hereinafter called the "Principal" and _____
(Surety)
of _____, State of _____

hereinafter called the "Surety", are held firmly bound unto the TOWN OF SOUTHBURY, Connecticut, 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, our heirs, executors, administrators and successors, 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 _____, 20____, a copy of which is hereto attached and made a part hereof for the construction of:

REPLACEMENT OF BRIDGE NO. 130-009 OLD FIELD ROAD OVER BULLET HILL BROOK.

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, subcontractors and corporations furnishing materials for or performing labor in the prosecution of the work provided for in such Contract and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such work, and all insurance premiums on said work and for all labor, performed in such work, whether by subcontractor or otherwise, 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 there under of the specifications accompanying the same shall in any wise 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 Contractor or to work of the specifications.

PROVIDED, FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, who claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in three (3) counterparts, each one of which shall be deemed an original, this the _____ day of _____, 20____.

ATTEST:

Principal

(Principal) Secretary

By: _____ (S)

(SEAL)

Address/Zip Code

Witness to Principal

ATTEST:

Surety

(Surety) Secretary

By: _____

(SEAL)

Attorney-in-Fact

Address/Zip Code

Witness to Surety

NOTE: Date of the Bond must not be prior to the date of the Contract. If the Contractor is a Partnership, all Partners should execute Bond.

ACKNOWLEDGMENT OF SURETY COMPANY

State of _____)
County of _____) ss:

On this _____ day of _____, 20____,

before me personally came _____ to me known to be the person named in the above instrument and who being by me duly sworn, did depose and say (he/she) resides in _____, that (he/she) is the _____ of the

corporation described in which is executed the above instrument; that (he/she) knows the seal of said corporation; that the seal affixed to said instrument is such corporate seal; that it was so affixed pursuant to a resolution of the Board of Directors of said corporation and that (he/she) signed (his/her) name by like order.

Notary Public

My Commission Expires: _____

(The Surety Company must append statement of its financial condition and a copy of the resolution authorizing the execution of bonds by officers of the company and the Power-of-Attorney of the Surety Company’s Attorney-in-Fact, authorized to act within the State of Connecticut.)

The foregoing bond and sureties are hereby approved.

Dated, Southbury, Connecticut _____, 20_____

Corporation Counsel, TOWN OF SOUTHBURY

Town Manager, TOWN OF SOUTHBURY

TOWN OF SOUTHBURY
CERTIFICATE OF NON-ARREARAGE

STATE OF CONNECTICUT))
COUNTY OF) ss:
)

_____ being duly sworn deposes and says that

1. He/She is the (Owner, Partner, Officer, Representative, or Agent) of
_____ the Bidder that has submitted the
attached Bid.

2. Neither the Bidder, nor their subcontractors are in arrears to the State of Connecticut Second
Injury Fund.

(Signed) _____

(Title) _____

Subscribed and sworn to before me this _____ day of _____, 20_____

Notary Public
Commissioner of the Superior Court

CERTIFICATE OF WAIVER AND RELEASE OF CLAIMS

TO ALL TO WHOM THESE PRESENTS SHALL COME OR MAY CONCERN, KNOW THAT

(Subcontractor Name/Address)
a corporation/partnership, business organized under the laws of the State of Connecticut, in consideration of the sum of:

(Written Figures) (\$ _____)
Received from

(General Contractor Name/Address)
receipt whereof is hereby acknowledged, hereby waives and relinquishes for itself, its heir, executors, administrators, successors and assigns, all rights to claim payment for work done and in place as of the date of this Release of the Project commonly known as the **REPLACEMENT OF BRIDGE NO. 130-009 OLD FIELD ROAD OVER BULLET HILL BROOK.**

(Name of Subcontractor)
hereby indemnifies the TOWN OF SOUTHBURY, Connecticut (Owner) against any and all claims for work performance and/or materials supplied by it/him/her/us under the above-mentioned Contract.

IN WITNESS WHEREOF:

(Subcontractor Name/Address)
has caused this Waiver and Release of Claims to be executed by its duly authorized officer this _____ day of _____, 20____.

Executed and delivered in the presence of:

Witness

Witness
By: _____

CONTRACTOR'S FINAL PAYMENT RELEASE

KNOW YE MEN BY THESE PRESENTS THAT:

_____ duly authorized to act on behalf of

(Contractor's Name and Address)_____ of

County and State of _____, for and in consideration of final payment is the sum of _____ Dollars (\$_____), lawful money of the United States of America, the receipt whereof is hereby acknowledged, in full satisfaction and payment of all sums of money owing, payable and belonging to _____ (Contractor) by any means whatsoever, for or on account of a certain agreement hereinafter called the Contract, between the TOWN OF SOUTHBURY (Owner) and _____ (Contractor), dated _____.

NOW, THEREFORE, _____ duly authorized to act on behalf of said _____ (Contractor), its successors, legal representative and assigns does hereby release, acquit, agree to indemnify and hold harmless and forever discharge the said TOWN OF SOUTHBURY (Owner), its officers, agents, servants and employees from all claims, demands and causes of action and actions, suits, debts, dues, duties, sum and sums of money, accounts, reckonings, bonds, bills, specialties, covenants, contracts, agreements, promises, variances, trespasses, damages, judgments, extent, executions, claims and demands whatsoever in law or equity, or otherwise that _____ (Contractor), its successors, legal representative and assigns may now have or that might subsequently accrue to _____ (Contractor) its successors, legal representatives and assigns out of or connected with, directly or indirectly, the Contract dated _____ between _____ (Contractor) and the TOWN OF SOUTHBURY (Owner) and any and all other bid documents, agreements and Contract modifications thereto.

Signed, Sealed and Delivered in the Presence of:

_____ (Witness)

By: _____

_____ (Witness)

Its duly Authorized _____

STATE OF CONNECTICUT)

) ss: _____ Dated:

COUNTY OF:)

Before me, on behalf of _____ personally appeared _____, duly authorized, to me known, and known to me to be the person named in and who executed the above release, and he/she acknowledges to me that he/she executed the same as his/her free act and deed.

Notary Public, Commission of Superior Court
My Commission Expires: _____

CONTRACTOR'S AFFIDAVIT

STATE OF: _____

COUNTY OF: _____

Before me, the undersigned, a _____ in and for said County and State
(NOTARY PUBLIC, JUSTICE OF THE PEACE, ALDERMAN)

personally appeared _____
(INDIVIDUAL, PARTNER OR DULY AUTHORIZED REPRESENTATIVE OF CORPORATE CONTRACTOR)

who, being duly sworn according to law, deposes and says that all labor, materials and outstanding claims and indebtedness of whatever nature arising out of the performance of the Contract of the TOWN OF SOUTHBURY, Connecticut

with _____ have been paid in full.
(CONTRACTOR)

(Individual, Partner or duly Authorized Representative of Corp. Contractor)

Sworn to and subscribed before me this

_____ day of _____, 20 _____

NOTARY PUBLIC

My Commission Expires: _____

STATEMENT OF SURETY COMPANY

IN ACCORDANCE with the provisions of the Contract dated _____ between the
TOWN OF SOUTHBURY, Connecticut and

(Contractor)

the _____ on the Material and Labor Payment Bond of
(Surety)

_____, after a careful examination of the books and
records

(Contractor)

of said Contractor or after receipt of an affidavit from Contractor, which examinations of affidavit satisfies said Surety that all claims for labor and materials have been satisfactorily settled, hereby approved of the final payment of the said _____, Contractor, and by these presents witnesseth that payment to the Contractor of the final estimates shall not relieve Surety of any of its obligations to the TOWN OF SOUTHBURY as set forth in the said Surety Company's Bond.

IN WITNESS WHEREOF, SAID SURETY has hereunto set its hand and seal this _____ day
of _____, 20_____.

ATTEST:

(SEAL) _____ BY _____
(President)

NOTE: THIS STATEMENT, IF EXECUTED BY ANY PERSON OTHER THAN THE PRESIDENT OR VICE PRESIDENT OF THE COMPANY, MUST BE ACCOMPANIED BY A CERTIFICATE OF EVEN DATE SHOWING AUTHORITY CONFERRED UPON THE PERSON SO SIGNING TO EXECUTE SUCH INSTRUMENTS ON BEHALF OF THE COMPANY REPRESENTED.

MAINTENANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned _____
(Contractor)

as Principal, and _____ as Surety, are held and firmly bound unto
the

TOWN OF SOUTHBURY, Connecticut, hereinafter called the "Town" in the final sum* of
_____ Dollars
(\$_____) lawful monies of the United States for the payment of which sum will and truly
be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally,
firmly by these presents.

* Final sum shall be 10% of the actual final construction cost.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal has executed an
Agreement, dated _____, 20____, for **REPLACEMENT OF BRIDGE NO.
130-009 OLD FIELD ROAD OVER BULLET HILL BROOK.**

NOW THEREFORE, the Principal agrees to maintain the work completed in the Contract, stated above, for a
period of two (2) years from the date of final payment and issuance of a Certificate of Completion, without
additional cost to the Town. Failure to comply with such required work shall constitute a violation and all
monies covered by this Bond shall become payable to the Town.

ANY CHANGES MODIFICATIONS, AMENDMENTS AND/OR ALTERATIONS TO THIS ORIGINAL
BOND FORM SHALL BE HIGHLIGHTED AND THE TOWN SHALL BE ADVISED OF SAME AND
CONSENT TO SAME PRIOR TO ITS ACCEPTANCE OF THE BOND AS SO CHANGED, MODIFIED,
AMENDED AND/OR ALTERED.

IN WITNESS WHEREOF, the above-bounded parties have executed this instrument under several seals this
_____ day of _____, 20____, the name and corporate seal of each corporate
party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to
authority of its governing body.

In the presence of:

_____(Seal)
(Individual Principal)

(Business Address)

_____(Seal)
(Partnership)

(Business Address)

By: _____

Attest:

(Corporate Principal)

(Business Address)

By: _____(Seal)

Attest:

(Corporate Surety)
Countersigned by:
_____ (Seal)

Power-of-Authority for Persons signing for Surety Company must be attached to Bond.

NOTICE OF AWARD

TO: _____

PROJECT DESCRIPTION: **REPLACEMENT OF BRIDGE NO. 130-009 OLD FIELD ROAD OVER BULLET HILL BROOK.**

The TOWN OF SOUTHURY has selected your firm as the apparent low bidder to perform construction of the **REPLACEMENT OF BRIDGE NO. 130-009 OLD FIELD ROAD OVER BULLET HILL BROOK** in Southbury, Connecticut in response to its advertisement for bids dated _____, 20__ You are hereby advised that your bid has been accepted for items in the amount of:

_____ (\$ _____)
(Written Figures)

_____ will be authorized to proceed with this work
or
(Firm Name)

service subject to the following: receipt and approval of the required insurance and bonds as specified in the Contract Documents; encumbrance of funds; and execution of the Agreement incorporating the Contract Documents by the First Selectman of the TOWN OF SOUTHURY.

You are required by the Information for Bidders to execute the Contract and furnish the required certificates of insurance(s) and bonds within ten (10) calendar days from the date of this Notice to you.

If you fail to execute the Contract and to furnish the required insurance certificate(s) and bond(s) within ten (10) calendar days of this Notice, the TOWN OF SOUTHURY will be entitled to consider all your rights arising out of the Town' acceptance of your Bid as abandoned and the Town will seek whatever remedies to which it is entitled by law and in equity.

You are required to return an acknowledged copy of this Notice of Award to the Town.

Dated this _____ day of _____, 20__

TOWN OF SOUTHURY, CONNECTICUT

By: _____

Title: _____

ACCEPTANCE OF NOTICE

The receipt of the Notice of Award is hereby acknowledged by:

(Signature)

(Firm Name)

(Printed Name/Title)

on this the _____ day of _____, 20_____

NOTICE TO PROCEED
(Refer to Agreement)

TO: _____

Date: _____

PROJECT DESCRIPTION: **REPLACEMENT OF BRIDGE NO. 130-009 OLD FIELD ROAD OVER BULLET HILL BROOK.**

You are hereby notified to commence work in accordance with the Agreement dated _____ on or before _____, 20_____, and you are to complete the work within _____ consecutive calendar days thereafter.

The date of completion of work is therefore: _____, 20_____

You are required to return an acknowledged copy of this NOTICE TO PROCEED to the Owner.

TOWN OF SOUTHBURY
Owner
By: _____
Title: _____

ACCEPTANCE OF NOTICE

Receipt of the above Notice to Proceed is hereby acknowledged by

this _____ day of _____, 20_____.

Contractor: _____
By: _____
Title: _____

TOWN OF SOUTHBURY
CHANGE ORDER

PROJECT: REPLACEMENT OF BRIDGE NO. 130-009
OLD FIELD ROAD
OVER BULLET HILL BROOK
SOUTHBURY, CONNECTICUT

Contract Date _____
Change Order Date: _____
Change Order No. _____

CONTRACTOR: _____

TO: TOWN OF SOUTHBURY, CONNECTICUT
SOUTHBURY, CONNECTICUT

_____, the Contractor, agrees that this change order adjusts the contract price and time to reflect fairly all overhead, profit, charges costs, expenses, delays, damages and the payments that may be claimed due and owing to the Contractor as of the above stated date and agrees that the acceptance of this change order by the owner will constitute a complete and final accord and settlement of Contractor' claims against the Owner on account of this work through the date of the Contractor' signature below.

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

Justification:

The Original Contract Sum was: \$ _____
Net Changes by previous Change Orders: \$ _____
The Contract Sum prior to this Change Order was: \$ _____
The Contract Sum will be (increased, decreased)
by this Change Order: \$ _____

The Contract Time will be (increased, decreased, unchanged) by _____ calendar days.
The Date for Completion as of the date of this Change Order therefore is _____

(Engineer) (Contractor) (Owner)

(Address) (Address) (Address)

By: _____ By: _____ By: _____

Date: _____ Date: _____ Date: _____

**REPLACEMENT OF BRIDGE NO. 130-009
OLD FIELD ROAD
OVER BULLET HILL BROOK
SOUTHURY, CONNECTICUT**

SPECIAL PROVISIONS

The State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges, Facilities and Incidental Construction, Form 819, 2024, and Special Provisions is hereby made part of this contract, as modified by the Special Provisions contained herein. Form 819 is available at the following DOT website link https://portal.ct.gov/dot/business/manuals?language=en_US.

CONTRACT TIME AND LIQUIDATED DAMAGES

One Hundred and Fifty (150) calendar days will be allowed for completion of the work on this Contract after which a liquidated damages charge will apply in the amount of One-Thousand, One-Hundred Dollars (\$1,200.00) per calendar day.

NOTICE TO CONTRACTOR - APPLICABILITY OF CONNECTICUT DOT - FORM 819

The State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges, Facilities and Incidental Construction, Form 819, 2024 (otherwise referred to collectively as "ConnDOT Form 819") is hereby made part of this contract, as modified by the Special Provisions contained herein.

All reference to the "State", and "Department" shall mean "Town of Southbury". The "Engineer" shall mean the "The Town Engineer, acting directly or through a duly authorized representative". The "Commissioner" shall mean the "Engineer".

The Town shall have the sole and absolute discretion to determine whether any provision of Form 819 shall be applied with respect to any issue which may arise between the parties.

Additionally, where there is a conflict between the terms and conditions set forth in the Town's bid specifications and those set forth in Form 819, the Town's bid specifications shall prevail.

NOTICE TO CONTRACTOR – POTENTIAL MODIFIED AWARD SCHEDULE (PERMITS)

The Contractor is hereby given notice that this contract may not be awarded until all Federal and State environmental permits have been received. If all environmental permits are not received, this contract may be withdrawn and re-advertised at the discretion of the Municipality. This shall not be the basis for any claims by any bidder.

NOTICE TO CONTRACTOR – PREQUALIFICATION REQUIREMENT

The Municipality shall only award the subject contract to a bidder that has been prequalified, prior to the opening of bids, by the Connecticut Department of Transportation for Group No. 8 Minor Bridges or Group No. 8A-Box Culverts construction.

NOTICE TO CONTRACTOR - BID REJECTION

Bidders are hereby notified that until the award of the Contract, the Municipality reserves to itself, the right to reject any or all bids for any reason whatsoever, and to waive technicalities as deemed to be in the best interests of the Municipality.

NOTICE TO CONTRACTOR - PROCUREMENT OF MATERIALS

Upon award, the Contractor shall proceed with shop drawings, working drawings, procurement of materials, and all other submittals required to complete the work in accordance with the contract documents.

NOTICE TO CONTRACTOR – SUPERVISION AND INSPECTION

This project will be supervised and inspected by the Municipality or its authorized agent. The "Notice to Proceed", stipulating the date on which the Contractor will begin the construction and from which date the contract time will be charged, will be issued by the Municipality.

NOTICE TO CONTRACTOR – MUNICIPAL PROJECT/FIELD OFFICE

Bidders are hereby notified that this is a Municipal project. As such the construction field office requires the approval of the Municipality's electrical inspector instead of the State's ConnDOT

electrical inspector. Additionally, the installation of a data communication circuit between the field office and the ConnDOT Data Communications Center in Newington will not be required.

NOTICE TO CONTRACTOR – PRE CONSTRUCTION MEETING

A pre-Construction meeting will be held between the contractor and the engineer to further define the limits of construction as detailed in this document. The contractor shall be aware that the quantities shown on the bid sheet are approximate and actual amounts / limits will be set at this meeting.

NOTICE TO CONTRACTOR - VERIFICATION OF EXISTING CONDITIONS

Included in this contract is the modification, alteration and/or addition to existing structures. Contractors are cautioned that it is their responsibility to verify locations, conditions, and field dimensions of all existing features, as actual conditions may differ from information shown on the plans or contained elsewhere in the specifications.

NOTICE TO CONTRACTOR – UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

If historic properties are unexpectedly encountered during Project construction, the contractor will immediately cease all construction activities in the immediate vicinity that may reasonably be assumed to affect the historic properties. Any historic property discoveries shall to the extent possible be protected in situ to allow for consultation among the Parties and the Tribes. The historic properties may be preserved in situ or mitigated on a case-by-case basis in consultation with the Parties and the Tribes. No artifacts are to be removed from the site unless approved by all parties. Notwithstanding anything to the contrary herein, the curation and disposition of any cultural resources shall be consistent with 36 C.F.R. Part 79 and other applicable law. If human remains are unexpectedly encountered during Project construction, the remains will be treated in a respectful manner and in accordance with the respective laws of the State of Connecticut (Connecticut General Statutes Chapter 184a Section 10-388) and State of Connecticut Department of Transportation, Standard Specifications for Roads, Bridges, Facilities and Incidental Construction, Form 819, 2024, Section 1.10.06.

NOTICE TO CONTRACTOR – FLOOD CONTINGENCY PLAN REQUIREMENTS

The Contractor is hereby made aware that under "Article 1.10.03 – Water Pollution Control" of Form 819, as amended by the Supplemental Specifications, the Contractor is required to submit a contingency plan for flood events, in writing, to the Municipality or its authorized agent for approval. The contingency plan must be submitted by the Contractor and approved by the Municipality or its authorized agent prior to the commencement of any Project construction in the waterway.

NOTICE TO CONTRACTOR – NO STORAGE OR STAGING OF MATERIALS WITHIN FLOODPLAIN WITHOUT REVIEW AND WRITTEN APPROVAL

The Contractor is hereby made aware that, in conformance with the approved environmental permits and with the Best Management Practices outlined under Section 1.10 – Environmental Compliance of Form 819, as amended by the Supplemental Specifications, the contractor shall not store or stage any materials or equipment within the Floodplain without prior review and written approval by the Engineer.

The Contractor shall submit a written plan detailing the materials and/or equipment to be stored or staged from with the floodplain, including such details as the presence of any materials that are potentially hazardous, buoyant, flammable, explosive, soluble, expansive, radioactive, or which could in the event of a flood be injurious to human, animal or plant life. No materials or equipment shall be stored or staged from within the Floodplain until the plan described above has been reviewed and approved by the Engineer.

NOTICE TO CONTRACTOR-NOISE POLLUTION

The contractor shall take measures to control the noise intensity caused by his construction operations and equipment, including but not limited to equipment used for drilling, pile driving, blasting, excavation or hauling.

All methods and devices employed to minimize noise shall be subject to the continuing approval of the Engineer. The maximum allowable level of noise at the nearest residence or occupied building shall be 90 decibels on the "A" weighted scale (dBA). Any operation that exceeds this standard will cease until a different construction methodology is developed to allow work to proceed within the 90-dBA limit.

NOTICE TO CONTRACTOR - CALL BEFORE-YOU-DIG

The Contractor's attention is called to the fact that they are obligated, by State Law, to notify the Public Utilities Control Authority (1-800-922-4455 or dial 811) 48 hours prior to beginning any digging or discharging of explosives. This "Call Before-You-Dig" system will assure that each utility company will have marked its lines in the field before any digging activity commences. The Contractor assumes all responsibilities for any damage to the various utility services, and all liabilities arising there from.

The Contractor shall make the necessary arrangements with the respective Utility Companies and provide grades for the resetting and adjusting of private utility lines, if necessary. This coordination and/or fieldwork required shall not be considered extra work or as a basis for extending the time for completion.

The Contractor is hereby notified that all utility specifications contained elsewhere herein shall be made a part of this contract, and that the contractor shall be bound to comply with all requirements of such specifications. The requirements and conditions set forth in the subject specifications shall be binding on the contractor just as any other specification would be.

NOTICE TO CONTRACTOR – PROTECTION OF EXISTING OVERHEAD UTILITIES

The Contractor's attention is directed to the need for protection of the existing overhead utilities during the demolition of the existing structure and the construction of the proposed structure. The Contractor is responsible for coordinating all protection and relocation of overhead utilities with the appropriate utility company. A 10-foot minimum clearance is to be provided from any unprotected overhead electric lines. The Contractor may need to adjust means and methods to accommodate this requirement, at no additional cost to the Town.

Representatives of the various utility companies shall be allowed access to work.

The Contractor shall be liable for all damages or claims received or sustained by any persons, corporations or property in consequence of damages to the existing utilities, their appurtenances, or other facilities caused directly or indirectly by the operations of the Contractor.

Any damage to any existing utility shall be repaired including all materials, labor, etc., to the engineer's satisfaction at no cost to the Town.

NOTICE TO CONTRACTOR - WORK NEAR OVERHEAD UTILITIES

1. Existing overhead utilities will remain in place and are to be protected by the Contractor.
2. No relocations of overhead utilities are anticipated.
3. **Utility poles within the project limits will remain in place and require support during excavation and construction operations. Contractor shall coordinate support requirements with the appropriate utility company.**
4. Contractor shall maintain proper clearances from overhead utilities and comply with all Local, State, and Federal regulations including OSHA. Particular attention will be required during installation of storm drainage improvements.
5. Coordinate all work that may interfere with existing utilities with respective utility companies. See specifications.

NOTICE TO CONTRACTOR – UTILITY COORDINATION

Overhead, elevated, or underground utility lines may be in conflict with required temporary or permanent construction, or the equipment necessary to perform this required construction. Depending on the Contractor's methods of construction, these utilities may need to be temporarily relocated for portions of the construction period and then moved back to permanent locations which may be other than their current locations. The Contractor is required to coordinate the exact location and timing of all utility relocations with the individual utility owners, and to phase his construction operations as required to accommodate all (temporary or permanent) utility relocations. In addition to field meetings and correspondence, this coordination may include staking of locations, excavation and temporary grading, providing access to existing and future utility pole and conduit locations, or other physical work as required to allow for utility relocation work. The Contractor shall engage in the necessary coordination of utility relocations and associated work at no additional cost to the project or owner, and shall have no right to additional compensation for staging and phasing of his work as a result of utility relocation work. The Contractor is responsible for coordinating utility relocation; the Municipality has the statutory authority for directing a utility to actually relocate.

NOTICE TO CONTRACTOR – UTILITY RELOCATIONS

Failure of the utility companies to relocate their facilities in a timely manner will not constitute the basis of a claim for additional compensation.

The following utilities are known to exist within the project limits:

<p><u>Southern New England Telephone Company</u> (dba Frontier Communications) Lynne Delucia Manager – Engineering & Construction 1441 North Colony Road Meriden, CT 06450 (203) 238-5000 Lynne.m.delucia@ftr.com</p>	<p><u>The Connecticut Light and Power Company</u> (dba Eversource Energy) Mr. Mark Bonjuklian Manager – distribution Projects and Programs 9 Tindall Avenue Norwalk, CT 06851 PHONE: 203-845-3456 EXT: Mobile: E-MAIL: mark.bonjuklian@eversource.com</p>
<p><u>Charter Communications Entertainment I. LLC</u> (dba Charter Communications of Western Ct Mr. Keith Cournoyer, Construction Supervisor 207 Tuckie Road North Windham, CT 06256 PHONE: (860) 456-8346 EXT: 53029 E-MAIL: Keith.Cournoyer@charter.com</p>	<p>Yankee Gas Services Company (dba Eversource Energy – Gas) Mr. Kenneth Cook, Lead Engineer, Gas Project Engineering 107 Selden Street, Mail Stop NUE2 Berlin, CT 06037 PHONE: 860-978-5465 EXT: Mobile: E-MAIL: kenneth.cookiii@eversource.com</p>
<p>The Connecticut Water Company dba Heritage Village Water Company Mr. Don Schumacher, General Manager 450 Heritage Road Southbury, CT 06488 PHONE: (203) 264-8100 E-MAIL: Dschumacher@ctwater.com</p>	

NOTICE TO CONTRACTOR – PROJECT SPECIFIC TESTING REQUIREMENTS

All testing of products and materials utilized on this project shall be in conformance with Form 819; with the latest Supplemental Specifications and the project’s supplemental specifications unless otherwise noted or amended in the Table below:

Chapter 7 - Suggested Minimum Schedule for Acceptance Testing (LOTICIP)

Local Transportation Capital Improvement Program (LOTICIP) 4/2/2019
ONLY Applies to Municipal Adminstered LOTICIP Projects not on National Highway System

Material Name	Unit	Test/Documentation	Frequency 1 per	Notes
Anchor Bolts	ea.	MC	project	1 per size
Asphalt Emulsions (CSS-1, RS-1 or SS-1)	gal	MC	10k	
Bituminous Concrete (HMA)	ton	D 2950 FLDT	day	See Note 3
Cement - Portland Type I/II	bag	FLDT	project	empty bag
Chemical Anchor	lb.	QPL MC	project	
Concrete-Ready Mixed	c.y.	T22 FLDT	75	4 cylinders
Construction Signing	ea.	MC	project	
Geotextile	s.y.	QPL MC	project	
Gravel (Bank Run or Crushed)	c.y.	T27 LABT	5k	
Grout, Non-shrink	bag	MC	project	
Masonry Brick & Block (Solid)	ea.	FLDT	project	See Note 1
Pipe - Reinforced Concrete	l.f.	PC-1	project	See Note 1
Pipe (Metal & Plastic) All types	lf	MC	project	See Note 1
Pipe Arch - Aluminum	lf	MC	project	See Note 1
Precast Concrete Items (not pipe)	ea.	PC-1	Item type	
Prestressed Concrete Members	ea.	LABT	1	See Note 2 & 3
Reclaimed Misc. Aggregate	c.y.	T27/Chem Analysis	2500	See Note 5
Reclaimed Waste	c.y.	T180 LABT	50k	See Note 5
Sand (Masonry /Trenching & Backfilling)	c.y.	T27 LABT	2500	
Sheet Piling	l.f.	MC	project	See Note 4
Sign Post	ea.	MC	project	See Note 1
Span Pole - Steel or Wood	ea.	MC	project	See Note 3
Steel Reinforcing Bars (Plain or Epoxy)	lb.	T244 MC	200t	
Stone (Broken/Crushed)	c.y.	T27 LABT	20k	
Structural Steel	cw	Shop Drawings	project	Notes 2, 3 & 4
Traffic Signal Equipment	ea.	MC	project	NA

Notes

1	Material should be inspected on the project site prior to use. Suspect material should be physically tested to determine conformance.
2	QC Inspection should be provided and documented during fabrication.
3	Contact the Department of Transportation Division of Materials Testing to determine vendor qualifications and QA inspection availability.
4	Documentation should be provided to determine conformance to Buy America requirements.
5	FORM MAT-212 should be completed and provided by the Contractor prior to use of material.

Test Method/Test Type

LABT	Laboratory Test
FLDT	Test performed in the field
QPL	ConnDOT Qualified Products List (http://www.ct.gov/dot/lib/dot/documents/dresearch/conndot_qpl.pdf)
PC-1	MAT-308 Required from producer with shipment
MC*	Materials Certificate

*Should comply with ConnDOT Standard Specification Section 1.06.07

NOTICE TO CONTRACTOR – CONTRACTOR TRAINING REQUIREMENT FOR 10-HOUR OSHA CONSTRUCTION SAFETY AND HEALTH COURSE

In accordance with Connecticut General Statute 31-53b and Public Act No. 08-83, the Contractor is required to furnish proof that any person performing the work of a mechanic, laborer or worker pursuant to the classifications of labor under section 31-53, has completed a course of at least ten hours in duration in construction safety and health approved by the Federal Occupational Safety and Health Administration or, has completed a new miner training program approved by the Federal Mine Safety and Health Administration in accordance with

30 CFR 48 or, in the case of telecommunications employees, has completed at least ten hours of training in accordance with 29 CFR 1910.268.

Proof of compliance with the provisions of the statute shall consist of a student course completion card issued by the Federal Occupational Safety and Health Administration, or other such proof as deemed appropriate by the Commissioner of the Connecticut Department of Labor, dated no earlier than five years prior to the commencement of the project. Each employer shall affix a copy of the construction safety course completion card for each applicable employee to the first certified payroll submitted to the Department of Transportation on which the employee's name first appears.

Any employee required to complete a construction safety and health course as required that has not completed the course, shall have a maximum of fourteen (14) days to complete the course. If the employee has not been brought into compliance, they shall be removed from the project until such time as they have completed the required training.

This section does not apply to employees of public service companies, as defined in section 16-1 of the 2008 supplement to the General Statutes, or drivers of commercial motor vehicles driving the vehicle on the public works project and delivering or picking up cargo from public works projects provided they perform no labor relating to the project other than the loading and unloading of their cargo.

The internet website for the federal Occupational Safety and Health Training Institute is <http://www.osha.gov/fso/ote/training/edcenters>. Additional information regarding this statute can be found at the Connecticut Department of Labor website: <http://www.ctdol.state.ct.us/wgwkstnd/wgemenu.htm>.

Any costs associated with this notice shall be included in the general cost of the contract. In addition, there shall be no time granted to the contractor for compliance with this notice. The contractor's compliance with this notice and any associated regulations shall not be grounds for claims as outlined in Section 1.11 - "Claims".

NOTICE TO CONTRACTOR - ENDANGERED SPECIES – NORTHERN LONG EARED BAT

The Contractor is hereby notified that the Federally Threatened and State Endangered species northern long-eared bat (NLEB) (*Myotis septentrionalis*), is present within the Project limits. In Connecticut, during the winter, northern long-eared bats hibernate in caves and mines, called hibernacula. They use areas in various sized caves or mines with constant temperatures, high humidity, and no air currents. During the summer, northern long-eared bats roost singly or in colonies underneath bark, in cavities or in crevices of both live trees and snags (dead trees). Males and non-reproductive females may also roost in cooler places, like caves and mines. NLEB seem to be flexible in selecting roosts, choosing roost trees based on suitability to retain bark or provide cavities or crevices. The removal and cutting of all trees ≥ 3 " in diameter is prohibited under a time-of-year (TOY) restriction by the United States Fish & Wildlife Service (USFWS) during the bats active season which are as follows. These dates are inclusive unless determined otherwise through consultation with the USFWS.

- a. April 15th – August 31st for all Connecticut Towns that do not front Long Island Sound and are not within 1 mile of a designated hibernacula.

- b. April 15th – September 30th for Connecticut Towns that front Long Island Sound and are not within 1 mile of a designated hibernacula.
- c. April 15th – October 31st for any project within 1 mile of a designated hibernacula. Hibernacula location areas are protected by the Department of Energy and Environmental Protection.

This species is protected by state and federal laws which prohibit killing, harming, taking, harassing or keeping them in your possession. Workers shall be notified of the existence of northern long-eared bat in this area and be apprised of the laws protecting them. Observations of any bat species are to be immediately reported to the Department of Energy and Environmental Protection at 860-424-3011.

NOTICE TO CONTRACTOR – TIME OF YEAR RESTRICTIONS

The Contractor is hereby notified of the following time of year restrictions:

In-Water Work

The Contractor is hereby alerted to the time of year restrictions imposed by the Environmental Permits contained elsewhere in this contract. Unconfined in-water work will only be allowed between June 1st and September 30th.

Confinement of a work area by cofferdam techniques using sandbag placement, sheet pile installation (vibratory method only), portadam, or similar confinement devices is allowed any time of the year unless specifically prohibited by a permit condition. The removal of such confinement devices is allowed any time of the year unless specifically prohibited by a permit condition. Once a work area has been confined, in-water work within the confined area is allowed any time of the year. The confinement technique used shall completely isolate and protect the confined area from all flowing water. The use of silt boom/curtain or similar technique as a means for confinement is prohibited.

NOTICE TO CONTRACTOR – SUPPLEMENT TO BEST MANAGEMENT PRACTICES

The contractor is hereby required to follow Best Management Practices (Section 1.10.03) as directed in the Connecticut Department of Transportation Form 819, Standard Specifications for Roads, Bridges and Incidental Construction (2024 as revised).

In addition to the Best Management Practices listed therein, the contractor will be required to breach or otherwise remove any flow diversion structures in advance of a storm prediction resulting in predictions of minor flooding as prescribed by the National Weather Service (NWS) Advanced Hydrologic Prediction Service (AHPS). These predictions can be found, among other locations, at <http://water.weather.gov/ahps/>. The contractor, unsolicited, may request of the engineer, guidance in advance of a pending storm on the flooding predictions for the area.

Further, in accordance with section 1.10.03, during spawning seasons and in spawning areas, discharges and construction activities shall be restricted so as not to disturb or inhibit aquatic species indigenous to the waters. Following CT DEEP Fisheries review, the period for in-stream water work will be limited to the period between June 1st and September 30th. No work in the stream will be allowed during the period between October 1st and May 31st.

NOTICE TO CONTRACTOR – PERMITS

The Contractor is hereby notified that all permit approvals (contained elsewhere in these specifications) shall be made a part of this Contract, and that the Contractor shall be bound to comply with all requirements of such permits and permit applications as though the Contractor were the permittee.

The requirements and conditions set forth in the permit shall be binding on the Contractor just as any other specification would be. In the case of a conflict between a provision of the environmental permit or permit application and another provision in the contract documents, the former shall govern.

The following permits are attached:

Town of Southbury Inland Wetlands and Watercourse Commission	Pending
Dept of Army Corps of Engineers – GP-19 PCN	Pending
CTDEEP 401WQC	Pending

SECTION 1.01
DEFINITIONS OF TERMS AND PERMISSIBLE ABBREVIATIONS

1.01.01—Definitions: is amended and supplemented as follows:

Substitute the word "Municipality" or "Municipal" for "Department" wherever "Department" appears in the definitions for each of the following terms: Award, Contract, Highway, Plans, and Project.

Substitute the word "Engineer" for "Commissioner" wherever "Commissioner" appears in the definitions for each of the following terms: Subcontractor and Sub-subcontractor.

Engineer: Delete the definition in its entirety and replace with the following:
The Town Engineer, acting directly or through a duly authorized representative.

Add the following:

Municipal: Of or relating to the Municipality.

Municipality: Town of Southbury, Connecticut

SECTION 1.02 PROPOSAL REQUIREMENTS AND CONDITIONS

Section 1.02 is supplemented and amended as follows:

Throughout this Section, make the following substitutions for all occurrences of the word(s) identified below for substitution:

Substitute "Engineer" for "Commissioner" and for "Division of Contracts."

Substitute "Municipality" or "Municipal" for "Department" and for "Contract Section".

1.02.01—Contract Bidding and Awards: is amended as follows:

Add the following two (2) paragraphs to the end of the existing paragraph.

On the date and at the time and place designated in the bid advertisement and in the related Notice to Contractors or addendum notice, the sealed paper bid proposals shall be publicly opened and read out loud. At the time that paper bid proposal is opened, it shall be checked for "responsiveness" in various respects, to determine if it complies with applicable statutes, regulations, and the Municipality's Specifications, including Connecticut DOT's Standard Specifications.

Each bidder is required to include with its paper bid proposal the following documents: the completed paper bid proposal form (incl. the schedule of prices), the required bid bond, a non-collusion affidavit, and any other information required by the bid documents or by the bid advertisement.

1.02.04—Examination of Plans, Specifications, Special Provisions, and Site of Work:

Delete the last paragraph and replace with the following:

"Bidders must inform the Municipality's Designer, at the earliest opportunity, in writing, of any and all omissions, errors, and/or discrepancies that the bidder discovers within or among the plans, specifications, and bidding documents. Information and inquiries concerning such matters, and any other information or inquiry concerning the conditions of bidding or award or the interpretation of contract documents must be transmitted in writing to:

Mr. Gary Giroux, P.E.
Cardinal Engineering Associates
180 Research Parkway
Meriden, Connecticut 06450
Tel: (203) 238-1969
Email: gary@cardinal-engineering.com

The Municipality and/or the Municipality's Designer cannot ensure a response to inquiries received later than seven (7) days prior to the scheduled bid opening of the related bid. When deemed warranted by the Municipality and/or the Municipality's Designer, responses to such inquiries that relate to changes in or interpretations of the Project documents (plans and specifications) will be issued to all bidders in the form of addenda and made a part of the Contract. Bidders are responsible for ensuring that they are aware of all addenda. Failure by the Municipality, Municipality's Designer or postal or other courier services to deliver addenda or other information regarding a

Contract being bid does not release the bidder from any obligations under said addenda or the conditions of the bid."

SECTION 1.03
AWARD AND EXECUTION OF CONTRACT

Section 1.03 is supplemented and amended as follows:

Throughout this Section, except for Article 1.03.07, make the following substitutions for all occurrences of the word(s) identified below for substitution:

Substitute "Engineer" for "Commissioner," for "Manager of Contracts" and for "Transportation Manager of Contracts".

Substitute "Municipality" for "Department" and "State".

1.03.02—Award and Execution of Contract:

After the second sentence of the only paragraph add the following:

The successful bidder is hereby notified of the Municipality's intent to award this Contract within thirty (30) days of the bid opening.

1.03.07—Insurance: is amended as follows:

Substitute "State and Municipality" for "Department" and "State".

It is the intent of this Article to designate the Municipality as additional insured, as applicable.

1.03.08—Notice to Proceed and Commencement of Work:

Change the first paragraph to read as follows:

The Contractor shall commence and proceed with the Contract work on the date specified in a written Notice to Proceed issued by the Engineer to the Contractor. The date specified will be no later than 30 calendar days after the date of the execution of the Contract by the Municipality; however, the Contractor is hereby put on notice that it is the Municipality's intent to issue the Notice to Proceed no later than thirty (30) calendar days after the execution of the Contract with the Municipality.

**SECTION 1.04
SCOPE OF WORK**

Section 1.04 is supplemented and amended as follows:

Throughout this Section, make the following substitutions for all occurrences of the word(s) identified below for substitution:

Substitute "Engineer" for "Department's Assistant District Engineer".

Substitute "Municipality" for "Department" and for "State".

1.04.05 – Extra Work: is amended as follows:

Add the following after the fourth sentence:

Bonding costs shall not be included in the contractor's compensation request. However, if the contractor incurs or will incur increased bonding costs related to the extra work, the contractor shall request separate compensation for such costs. The contractor's request shall be itemized and include a certified statement from the bonding company stating that the value of the work will require an increase in bonding coverage and shall detail the additional costs (within allowable contract amount limitations). If *satisfactory* substantiation is provided, a new item for increased bonding costs will be incorporated into the contract by means of a construction order.

Insert the following immediately following "Department's Assistant District Engineer" near the bottom of the paragraph: "and/or the Municipality's authorized representative".

**SECTION 1.05
CONTROL OF THE WORK**

Section 1.05 is supplemented and amended as follows:

Substitute "Municipality" for "Department" and/or "State" and "Engineer" for "Department's Assistant District Engineer".

1.05.02-1. Plans: Substitute "Municipality" for "Department".

Add the following sentence to the end of the Subarticle:

"The Working Drawings, Shop Drawings and Product Data shall be submitted to the Designer as hereinafter noted; copies of transmittal letters shall be sent to the Municipality.

Designer

Gary Giroux, P.E.
Cardinal Engineering Associates, Inc.
180 Research Parkway
Meriden, Connecticut 06450
Tel: (203) 238-1969
Email: gary@cardinal-engineering.com

Mr. Jeff Manville

First Selectman
Town of Southbury
501 Main Street South
Southbury, Connecticut 06488
Tel: (203) 262-0647
Email: selectman@southbury-ct.gov

Municipality

1.05.02-2. Working Drawings: Substitute "Municipality" for "Assistant District Engineer".

1.05.02-3. Shop Drawings:

Add the following paragraphs:

If the contractor proposes a substitution, all costs associated with the review of shop drawings, working drawings, designs or any other submissions related to the substitution including all costs incurred by the Owner and the Engineer shall be paid by the Contractor.

Each shop drawing submittal shall be identified as to the following, and stamped by the Contractor as being in complete compliance with all requirements of the Contract Drawings and Specifications:

1. Project Name and Contract Number
2. Specification Section number(s) and subparagraph(s)
3. Contract Drawing sheet number(s)

The General Contractor shall check all shop drawings for conformance with the Contract Documents and particularly against field measurements and proper fit with adjoining work prior to submitting same. A certification shall appear on each shop drawing stating that the General Contractor has made this check.

Any and all deviations from the requirements of the Drawings and/or Specifications shall be called to the attention of the Engineer in writing at the time of first submission of shop drawings, equipment data, and other drawings for approval.

1.05.02-5. Submittal Preparation and Processing – Review Timeframes:

Substitute "Designer" for "Department".

Add the following paragraphs:

"Prior to the submission of any working, shop or erection drawings, the Contractor shall prepare and submit to the Engineer, for approval, a schedule for all proposed working and shop drawings. This initial schedule should be submitted within thirty (30) days of contract award and must be submitted before the Notice to Proceed. The Contractor shall coordinate, schedule and control all submittals of working and shop drawings including those of his various subcontractors, suppliers and engineers to provide for an orderly and balanced distribution of the work.

Each Shop Drawing shall include the name and telephone number of the fabricator's contact person who is familiar with the drawing and who will be available to answer questions by the Engineer or Designer should any arise during the review process.

It is incumbent upon the Contractor to submit his shop drawings in accordance with the approved working and shop drawing schedule to facilitate expeditious review. Voluminous submittals of shop drawings at one time are discouraged and may result in increased review time. In no case will the Municipality accept liability for resulting delays, added costs and related damages when the time required for approval extends beyond the approximate times shown herein when the shop drawings are not submitted in conformance with the approved schedule."

1.05.02-5(a). Submissions: Substitute "Municipality" for "Assistant District Engineer of the administering Construction District".

1.05.02-5(b). Submissions: Substitute "Designer" for "Assistant District Engineer of the administering Construction District".

1.05.02-5(c). Submissions: Substitute "Designer" for "administering Construction District".

1.05.06 – Cooperation with Utilities (including railroads):

Add the following:

Within the project there may be public utility structures; and, notwithstanding any other clause or clauses of this Contract, the Contractor cannot proceed with his work until he has made diligent inquiry with the utility companies, municipal authorities or other utility owners to determine their exact location, and notified "Call Before You Dig". The Contractor shall notify, in writing, the utility companies, municipalities or other owners involved of the nature and scope of the project and of his operations that may affect their facilities or property. Copies of such notices shall be sent to the Engineer.

**SECTION 1.06
CONTROL OF MATERIALS**

Article 1.06.07 - Certified Test Reports and Materials Certificates:

Add the following:

All materials used on this project shall require a Certified Test Report or Material Certificate.

Following is a partial list of items that may be included in the project.

1. For the materials in the following items, a Certificate Test Report will be required confirming their conformance to the requirements set forth in the plans, these Specifications or both. Should the consignee noted on a Certified Test Report be other than the Prime Contractor, then Materials Certificates shall be required to identify the shipment.

Subbase	Granular Fill	Cast in Place Concrete
Pervious Structure Backfill	Processed Aggregate Base	Deformed Steel Bars
Topsoil	Joint Sealer	Riprap
Bedding Material	Cement	#8 Stone
#6 Stone	Anchoring Cement	#67 Stone
Sand	Chemical Anchors	Threaded Steel Bars

2. For the material in the following items, a Materials Certificate will be required confirming their conformance to the requirements set forth in the plans or these specifications if it is from a Connecticut Department of transportation approved plant/supplier. Otherwise, testing is required.

Bituminous Concrete	Portland Cement Concrete	Footing Concrete
Portland Cement	Abutment and Wall Concrete	Pavement Marking
Signs	Sanitary Manhole Brick (for invert)	Joint Sealer
Concrete Building Brick	Masonry Concrete Units	Deformed Steel Bars
Reinforcing Steel	Wire & Welded Wire Fabric	Threaded Steel Bars
Anchor Bolts	Structural Steel	Membrane Waterproofing
Dowel Bars	Galvanizing	Wetland Seed Mix
Paint	Damp Proofing	Precast Concrete Units
Metal Beam Rail Elements	Grass Seed	Fertilizer
Precast Concrete Box Culvert		

**SECTION 1.07
LEGAL RELATIONS AND RESPONSIBILITIES**

1.07.01—Laws to be Observed: is amended as follows:

In the second sentence of the first paragraph, after the word "State" add the words "and Municipality".

1.07.03—Proprietary Devices, Materials and Processes: is amended as follows:

After the word "State" add the words "and Municipality" throughout this Article.

1.07.04—Restoration of Surfaces Opened Pursuant to Permit or Contract: is amended as follows:

Replace the word "Department" with "Municipality" throughout this Article.

1.07.07—Safety and Public Convenience: is amended as follows:

In the penultimate paragraph, after the word "Department," add the words "or Municipality".

1.07.09—Protection and Restoration of Property: is supplemented and amended as follows:

Add the words "or Municipality" after the word "State" wherever the word "State" appears in this Article.

Add the phrase "or Municipality, as applicable" after the word "Department" wherever the word "Department" appears in this Article.

Add the following:

The Contractor shall notify the Tree Warden of the Municipality in which the bridge project is located, five (5) days prior to flagging so that the Tree Warden may be present during the flagging.

All trees scheduled to be removed outside of the proposed gutter or curb lines of the highway shall be visibly marked or flagged by the Contractor at least five (5) days prior to cutting of such trees.

The Engineer will inspect the identified trees and verify the limits of tree removal prior to the Contractor proceeding with his cutting operation, should such an operation be required elsewhere in this contract.

1.07.10 - Contractor's Duty to Indemnify the State Against Claims for Injury or Damage: is amended as follows:

Revise the title of this Article to read "Contractor's Duty to Indemnify the State and/or Municipality Against Claims for Injury or Damage."

In the first sentence, delete the words "the Department".

Replace the word "State" with "State and/or Municipality" throughout this Article.

Replace the word "Commissioner" with "Engineer" throughout this Article.

Add the following paragraph after the only paragraph:

"It is further understood and agreed by the parties hereto, that the Contractor shall not use the defense of Sovereign Immunity in the adjustment of claims or in the defense of any suit, including any suit between the State and/or Municipality and the Contractor, unless requested to do so by the State and/or Municipality."

1.07.13—Contractor's Responsibility for Adjacent Property and Services: is supplemented with the following:

The Contractor's attention is directed to the fact that overhead utilities (including utility poles, pole guys and overhead wires) exist in the immediate vicinity of the project.

The Contractor shall be liable for all damages and claims received or sustained by any persons, corporations or property in consequence of damage to the existing utilities, their appurtenances, or other facilities caused directly or indirectly by the operations of the Contractor.

1.07.14—Personal Liability of Representatives of the State: is amended as follows:

Add the words "and Municipality" after the word "State".

1.07.15—No Waiver of Legal Rights: is amended as follows:

Replace the words "Commissioner" and "Department" with "Municipality" or "Municipal" throughout this Article.

1.07.16—Unauthorized Use of Area(s) within the Project Site: is amended as follows:

Replace the words "Commissioner" and "State" with "Municipality" throughout this Article.

Add the following new Subarticle:

1.07.19—Personal Liability of Representatives of the Municipality

In carrying out any of the provisions of these specifications, or in exercising any power or authority granted to them by or within the scope of the Contract, the Engineer and his authorized representatives, including consultant engineering firms and their employees, shall be subject to no liability, either personally or as officials of the Municipality, it being understood that in all such matters they act solely as agents and representatives of the Municipality.

**SECTION 1.08
PROSECUTION AND PROGRESS**

Section 1.08 is supplemented and amended as follows: Section 1.08 is supplemented and amended as follows:

Throughout this Section, make the following substitutions for all occurrences of the word(s) identified below for substitution:

Substitute "Municipality" or "Municipal" for "Department" and for "State". Substitute "Engineer" for "Commissioner".

1.08.04—Limitation of Operations: is supplemented by the following:

The Contractor's activities on site shall be limited to operations between 7:00 a.m. to 5:00 p.m., Monday through Friday except legal holidays.

The Contractor will be allowed to close Old Field Road at the project limits to through traffic and detour traffic as shown on the Detour Plan contained in the Contract Plans with the following conditions.

The Contractor shall coordinate with the Town of Southbury at least fourteen (14) days prior to proposed roadway closures. The roadway cannot be closed until authorized by the Town and after the precast box culvert fabrication has begun.

The Contractor shall guarantee that he can and will substantially complete the work necessary to safely open Old Field Road to bi-directional traffic within 180 calendar days from the Notice to Proceed. Traffic shall be maintained on a paved surface with minimum 12-foot lanes in each direction. To safely open the road to traffic, it is expected that the project will be substantially completed including the following:

- Road will be paved through the project area
- Guide railing will be completely installed or an approved safety barrier will be installed.

The Contractor will be permitted to interfere with normal or staged traffic operations only at the discretion of the Engineer.

The Contractor shall then physically close the road to traffic as shown on the plans or as directed by the Engineer.

The Contractor shall schedule his construction operations, so that construction at the site in this contract does not begin, extend into or end during the period from December 1 through March 31, except as approved by the Engineer.

**SECTION 1.09
MEASUREMENT AND PAYMENT**

Section 1.09 is supplemented and amended as follows:

Throughout this Section, make the following substitutions for all occurrences of the word(s) identified below for substitution:

"Municipality" or "Municipal" for "Department" and for "State".

Substitute "Engineer" for "Commissioner".

1.09.06–Partial Payments: Amend Article 1.09.06 of Form 818, 2022, as amended by the January 2023 supplement, as follows:

In the first paragraph under **A. Monthly and Semi-monthly Estimates:** delete "Retainage will not be held" and replace with "**five percent (5%) of the total amount determined by the Engineer will be deducted from the estimate and retained by the Municipality until the Engineer accepts the Project**". The balance, less all previous payments, will be certified for payment. When work equaling the original contract value has been accomplished, no additional retainage will be withheld.

1.09.07-Final Payment: Replace with the following:

a.) After final inspection and acceptance by the Town of all work under the Contract, the Contractor shall prepare a requisition for final payment which shall be based upon the carefully measured or computed quantity of each item of work at the applicable unit prices stipulated in the agreement. The total amount of the final payment due the Contractor under this Contract shall be the amount computed as described above less all previous payments. Final payment to the Contractor shall be made subject to the Contractor furnishing the Town with the release in satisfactory form of all claims against the Town under and by virtue of this contract, other than such claims, if any, as may be specifically accepted by the Contractor from the operation of the release as follows:

1. All disputes arising under this Contract or its interpretation, whether involving law or fact or both, or extra work, and all claims for alleged breach of Contract shall within ten (10) days of commencement of the dispute be presented by the Contractor to the Town for decision. All papers pertaining to claims shall be filled in quadruplicate. Such notice need not detail the amount of the claim, but shall state the facts surrounding the claim in sufficient detail to identify the claim, together with its character and scope. In the meantime, the Contractor shall proceed with the work as directed. Any claim not presented within the time limit specified within this paragraph shall be deemed to have been waived, except that if the claim is of a continuing character and notice of the claim is not given within ten (10) days of commencement, the claim will be considered only for a period commencing ten (10) days prior to the receipt by the Town of notice thereof.
2. The Contractor shall submit in detail its claim and its proof thereof. Each decision by the governing body of the Town will be in writing.

3. If the Contractor does not agree with any decision of the Town it shall in no case allow the dispute to delay the work but shall notify the Town promptly that it is proceeding with the work under protest and it may then except the matter in question from the final release.

b.) The Town, before paying the final estimate, will require the Contractor to furnish releases of receipts from all subcontractors having performed any work and all persons having supplied materials, equipment (installed on the project) and services to the Contractor, if the Town deems the same necessary in order to protect its interest. The Town, however, may if it deems such action advisable, make payment in part or in full to the Contractor without requiring the furnishing of such releases or receipts and any payment so made shall in no way impair the obligations of any surety or sureties furnished under this Contract.

Further, the Town may, if it deems such action advisable, make payment in part or in full to the Contractor, although the Town has notice or knowledge of the existence of claims, causes of action, or disputes by subcontractors, laborers, material men, suppliers of equipment and services and others, against the Contractor, and any payments so made shall in no ways impair the obligations of any surety or sureties furnished under this Contract.

c.) Before the approval of the final estimate, the Contractor shall submit to the Owner and to his Surety, a notarized CONTRACTOR'S AFFIDAVIT attesting to the fact that the bills of whatever nature have been paid.

d.) In addition, a list of all claims by residents shall be submitted by the Contractor's insurance company, stating the status of each claim.

e.) In addition, before approval of the final estimate, the Contractor's Surety shall submit to the Owner and the Engineer a STATEMENT OF SURETY COMPANY stating satisfaction in following careful examination of the books and records of the Contractor and, after receipt of CONTRACTOR'S AFFIDAVIT described above, all claims for labor and materials related to the Contract have been satisfactorily settled.

f.) In addition, before the release of final payment, the Contractor shall submit to the Owner, completed MAINTENANCE BOND and CONTRACTOR'S FINAL RELEASE. The Maintenance Bond shall be in the amount of Ten Percent (10%) of the Contract Sum and shall be in effect for one (1) year after release of final payment.

SECTION 1.10
ENVIRONMENTAL COMPLIANCE

1.10.02—Compliance with Laws and Regulations: is amended as follows:

Replace the word "Department" with "Municipality" throughout this Article.

In the last sentence of the last paragraph of this Article, and delete the phrase "under any other State contract".

1.10.03—Water Pollution Control: is amended as follows:

Replace the word "Department" with "Municipality" throughout this Article.

In the last sentence of the second paragraph, delete the phrase "under any other State contract".

Add the following sentence after the second sentence of the third paragraph:

The following items may also be superseded by specific permits from the Connecticut Department of Energy and Environmental Protection (DEEP), the Army Corps of Engineers (ACOE) and/or the appropriate local wetlands and watercourses regulatory authority.

In Paragraph No. 13, replace "State right-of-way" with "State or Municipal right-of-way."

1.10.07—Controlled and Hazardous Materials: is amended as follows:

Replace the word "Department" with "Municipality" throughout this Article.

SECTION 1.11
CLAIMS

Section 1.11 is supplemented and amended as follows:

Throughout this Section make the following substitutions for all occurrences of the word(s) identified below for substitution:

Substitute "Chief Administrative Official of the Municipality" for "Commissioner".

Substitute "Municipality" or "Municipal" for "Department".

DIVISION II
CONSTRUCTION DETAILS

Throughout all the various Sections contained in Division II, substitute the word "Municipality" or "Municipal" for "Department" wherever "Department" appears, except in those instances here the word "Department" is used to identify a state agency.

ITEM #0201001A - CLEARING AND GRUBBING

Work under this item shall conform to the requirements of Section 2.01 amended as follows:

2.01.03 – Construction Methods: *Add the following:*

All fences, mailboxes, sign posts, bollards, railings, stumps, shrubs, hedges, plantings, stone fences, etc., ornamental and utilitarian domestic accessories within the slope limit lines, shall be removed and reset (or disposed of) as directed by the Engineer.

ITEM #0202000A – EARTH EXCAVATION

Work under this item shall conform to the requirements of Section 2.02 of the Standard Specifications amended as follows:

2.02.04 – Method of Measurement: *Delete second paragraph and replace with the following:*

Unsuitable material, as designated by the engineer, below the subgrade in cut sections, below the original ground line in fill sections and beyond the normal payment lines for ditch and channel excavation shall be measured as earth excavation.

ITEM #0202216A - EXCAVATION AND REUSE OF EXISTING CHANNEL BOTTOM MATERIAL

Description: Work under this item shall consist of excavating existing channel bottom material in areas where the channel bottom is to be re-graded or disturbed to create a work area for a culvert or bridge or articulated concrete block placement and cofferdam installation. This item shall also include stockpiling and protecting the excavated material on the project site, subsequent placement of the stockpiled material in the channel, removal and proper disposal off-site of all unused material.

Materials: The material for this item shall consist of the existing naturally formed cobbles, gravel, soils and clean natural sediment from within the channel.

Rock excavated from ledge (bedrock) formations, or broken from larger boulders, will not be accepted. Broken concrete will not be accepted.

If an insufficient quantity of material is available from the existing channel bottom at this site, the Contractor shall furnish supplemental material meeting the approval of the Engineer from other sources within the project limits, or from another approved source. Supplemental Material shall conform to the requirements of the Special Provision for "Rounded Stone Riprap." Material the Contractor proposes to bring to the site from another source must be inspected and approved by the Engineer at the source prior to the excavation or hauling of the material.

Construction Methods: The Contractor shall prepare an area, approved by the Engineer, suitable in size and location for storing the excavated channel bottom material, so that it will not be contaminated, mixed with other excavated material or erode. Select a location where disruption to the channel and wetland areas caused by moving the excavated material to and from the stockpile is minimized. Locate the stockpile where it can remain undisturbed for the duration of construction. Identify the temporary stockpile area(s) prior to the start of excavation for approval by the Engineer.

Prepare a clean surface for the stockpile adequate to prevent mixing with the underlying soil or other material. Provide adequate measures to contain the stockpiled material and protect it from erosion by rain or other forces. Store material excavated from the existing channel bottom separately from other excavated materials until it may be reused or disposed of, as directed by the Engineer. Do not add any other excavated or imported material to the stockpile of channel bottom material.

After clearing and grubbing, the Engineer will identify the limits of exposed channel bottom material to be excavated under this item. Only areas within the limits of channel to be re-graded or disturbed to create a work area for the culvert or bridge or articulate concrete block placement and cofferdam placement will be identified for excavation. As much material as possible, will be identified for this excavation. The Engineer will identify the bottom limit of the excavation based on the qualities of the material encountered. Do not in any case excavate below the depth otherwise required for culvert or bridge and cofferdams, including any unsuitable material excavation. Perform the excavation separately, prior to beginning any other roadway, structure, channel, or unsuitable material excavation in the area.

The Contractor shall perform all containment, diversion, or other separation of the channel flow from the excavation of channel bottom material in accordance with the requirements of “Handling Water” or “Cofferdam and Dewatering”.

Complete all stages of the culvert or bridge or articulated concrete block construction and cofferdam installation, to the satisfaction of the Engineer, before placing any existing channel bottom material.

Place the channel bottom material to the thickness and in the locations shown on the plans, and as directed by the Engineer. Use equipment and placement techniques that will prevent integration with the surrounding material and keep the channel bottom material relatively homogeneous. Place the channel material in a manner that replicates the original condition of the channel, with a well-defined low flow channel connecting to the existing channel.

Place or dispose of any surplus or unsuitable material in accordance with Section 2.02. Restore the stockpile area as directed by the Engineer.

All material not identified for excavation in accordance with this specification shall be excavated, as required for other contract work, in accordance with Section 2.02.

Method of Measurement: Work under this item will be measured for payment by the actual number of cubic yards of channel bottom material excavated and stockpiled in accordance with this specification. The Engineer will delineate the horizontal pay limits before the start of excavation. The vertical pay limits will be measured from the existing channel bottom to the bottom of the excavation required specifically for the stockpiling of existing channel bottom material.

Material excavated beyond the approved horizontal pay limits, or deeper than the depth of channel bottom material identified and approved by the Engineer will not be measured for payment under this item. Such additional excavation required to complete the contract work, including roadway, structure, channel, and unsuitable material excavation, will be measured for payment separately under the applicable pay items. In no case will excavated material be measured for payment under more than one pay item.

The storage, re-excavation, placement and/or disposal of the channel bottom material will not be measured for payment.

Basis of Payment: Payment for this work will be made at the contract unit price per cubic yard for "Excavation and Reuse of Existing Channel Bottom Material". The price shall include all materials, equipment, tools and labor incidental to the preparation of the stockpile area, excavation of channel bottom, hauling of the material to the stockpile area, storing, protecting, and final placement of the excavated channel bottom material. The price shall also include the removal and placement or disposal of surplus or unsuitable excavated material.

If bank run gravel is required and approved for use as supplemental material at the site, furnishing and placing the bank run gravel will be paid for as extra work, in accordance with Article 1.04.05.

Payment for all containment, diversion, or other separation of the Stream flow from the excavation of channel bottom material will be included in the item "Handling Water" or "Cofferdam and Dewatering".

Payment for clearing and grubbing will be included in the item "Clearing and Grubbing".

Excavation of material not identified by the Engineer for stockpiling and re-use in accordance with this specification will be paid in accordance with Section 2.02.

Pay Item
Excavation and Reuse of Existing Channel Bottom Material

Pay Unit
C.Y.

ITEM #0202219A – SUPPLEMENTAL STREAMBED CHANNEL MATERIAL

Description: This work shall consist of procuring, transporting and placing supplemental streambed channel material meeting the visual inspection requirements herein, along stream bank/channel improvement locations as shown on the plans or denoted on the Project's permit applications. This work shall also include any necessary temporary protection and stockpiling of the supplemental streambed channel material on the Site and removal and proper disposal of all unused material.

Materials: When a sufficient quantity of material is not available from the existing streambed channel within the permitted footprint of the Site, the Contractor shall furnish visually inspected and accepted supplemental streambed channel material from an off-Site source.

The supplemental streambed channel material for this item shall be consistent with the existing naturally-formed cobbles and rocks, gravel, and clean natural sediments found within the existing channel. Rock excavated from ledge (bedrock) formations, broken from larger boulders, broken concrete or angular material will not be accepted. Rock larger than 12 inches in diameter will not be accepted. Silts and clays will not be accepted.

The visual inspection of the supplemental streambed channel material shall be performed by the Engineer at the off-Site source prior to delivery of material to the Site. The Contractor shall notify the Engineer at least 10 days in advance of the need for inspection of proposed off-Site material.

Construction Methods: At the start of construction, the Contractor shall prepare an area, approved by the Engineer, suitable in size and location for stockpiling the supplemental streambed channel bottom material. The Contractor shall select an upland location where disruption to the stream channel or impact to wetland areas caused by moving the supplemental streambed channel bottom material to and from the stockpile are minimized during the placement of material. The stockpile shall be located where it can remain undisturbed for the duration of the stream channel construction and shall be protected using sedimentation control measures.

The stockpile area shall be cleared and cleaned adequately to prevent mixing with underlying soil or other materials, including the use of structural fabric if required. The stockpile area shall be adequately covered to protect the supplemental streambed channel material from erosion by rain or other forces. After the supplemental streambed channel material and the excavated channel bottom material to be reused have been placed in the stockpile areas, no other excavated or off-Site material shall be placed in the stockpiles.

The reused and supplemental streambed channel material shall be placed at the designated location(s) to the required thickness as shown on the plans or denoted on the permit application, or as directed by the Engineer. Equipment and placement techniques shall prevent integration with the surrounding material and shall keep the channel bottom material relatively homogenous.

Reused and supplemental streambed channel material shall be placed in a manner that replicates the original condition of the channel prior to excavation.

The Contractor shall perform all containment, diversion, or other separation of the channel flow when placing the reused and supplemental streambed channel material to minimize sediment transport downstream.

The disposal of any surplus or unsuitable material shall be in accordance with Section 2.02. Restore the stockpile area as directed by the Engineer.

Method of Measurement: The quantity of supplemental streambed channel material measured for payment shall be the number of cubic yards whose length and width is measured in place as accepted and the thickness as shown on the plans.

Basis of Payment: This work will be paid for at the Contract unit price per cubic yard for supplemental streambed channel material, complete in place, including all materials, equipment, tools and labor incidental thereto.

Payment for clearing and grubbing of the approved stockpile area will be included in the item "Clearing and Grubbing."

Payment for excavation and reuse of existing channel bottom material will be included in the item "Excavation and Reuse of Existing Channel Bottom Material."

Payment for all containment, diversion or other separation of stream flow from the excavation of channel bottom material will be included in the item "Cofferdam and Dewatering" or special provision for "Handling Water."

Pay Item	Pay Unit
Supplemental Streambed Channel Material	C.Y.

ITEM #0204151A - HANDLING WATER

Description: Work under this item shall consist of designing, furnishing, installing, maintaining, removing and disposing of a temporary water handling system. This may include water-handling-cofferdams (temporary barriers), bypass pipes, bypass pumps/hoses, temporary energy dissipation, sumps, drainage channels, and equipment and work necessary for dewatering.

A temporary water handling system redirects surface water beyond, through, or around the limits of construction to allow work to be done in the dry.

Materials: The materials required for this work shall be as shown on the plans, on the accepted working drawings, or as ordered by the Engineer.

Construction Methods: The Contractor shall prepare and submit written procedures for handling water. Working drawings, in accordance with Article 1.05.02, shall also be prepared and submitted.

The Contractor shall consider stream conditions and water elevations associated with the Site to determine the type of temporary water handling system required to redirect water away from work being performed. The system shall be designed to be compatible with the stage construction and Maintenance and Protection of Traffic, as indicated in the Contract, and shall conform to Section 1.10.

The Contractor shall be responsible for maintenance of the water handling system. If the system becomes damaged or displaced during construction, the system shall be corrected as required.

Unless otherwise provided or directed, all temporary water handling system components shall be removed and disposed of in an acceptable manner when no longer required.

Method of Measurement: The work under this item, being paid on a lump sum basis, will not be measured for payment.

Basis of Payment: This work will be paid for at the Contract lump sum price for “Handling Water” complete and accepted, which price shall include designing (including submittals and working drawings), furnishing, installing, maintaining, removing, and disposing of all temporary water handling system components as are necessary for completion of the work. This price shall include all materials, equipment, tools, labor and work incidental thereto.

A schedule of values for payment shall be submitted to the Engineer for review and comment.

Pay Item	Pay Unit
Handling Water	l.s.

ITEM #0210303A - TURBIDITY CONTROL CURTAINS

Description:

Work under this item shall consist of the furnishing, deployment, maintenance and removal of a silt dam/debris containment floating barrier between the open stream/water body and work areas and cofferdams, as well as downstream of the project as needed, for protection of the environment.

Materials:

Turbidity control curtain shall be one of the following:

Seabroom Turbidity Curtain

Manufactured by: Sunshine Technology Corporation
P.O. Box 17041
West Hartford, CT 06117

Silt dam/Floating Silt Containment Barrier/Turbidity Boom

Manufactured by: Brockton Equipment Company
15 Perkins Avenue
P.O. Box 3219
Brockton, MA 02403

PSI Silt/Turbidity Barrier

Manufactured by: Parker System, Inc.
P.O. Box 1652
Norfolk, VA 23501

Anchors, leaders, tension lines and any additional material/equipment necessary for the successful use of the turbidity curtain shall be designed and installed as per the manufacturer's recommendations to withstand the flow conditions at the bridge.

Construction Methods:

The depth, length, location, configuration and method of deployment of the turbidity control curtain shall conform to the manufacturer's specifications and that required for actual field conditions. The Contractor shall submit a plan showing this information to the Engineer for approval. Construction shall not begin until such approval is obtained in writing.

The silt dam/turbidity control curtain shall be ready for installation prior to the start of construction and shall be in place at all times when the Contractor is required to work in or perform work that

causes any type of disturbance in the river, or is discharging to the river. The turbidity control curtain shall be kept in place continuously during the duration of construction and until all substructure and or work; requiring discharge to the river is complete, including removal of all cofferdams and forms. The turbidity control curtain shall be changed and disposed of in accordance with the manufacturer's recommendations or at the request of the Engineer.

The Contractor shall note that high water flows may result in damage or loss of the turbidity control curtains, in which case the curtains shall be repaired, reset or replaced, as directed by the Engineer.

Method of Measurement:

This item shall be at the Contract lump sum for turbidity control curtain installed, which is properly functioning and approved for payment.

Basis of Payment:

This work will be paid for at the Contract lump sum price for the item “Turbidity Control Curtains,” which price shall include the cost of furnishing, deploying, maintaining, repairing, relocating, resetting, replacing and removing the debris containment barrier, in addition to changing and properly disposing of the silt or debris material, as well as the cost of all cables and ties, labor, materials, equipment and tools incidentals thereto, necessary to complete this work

Pay Item

Pay Unit

Turbidity Control Curtain

LS

ITEM #0212000A – SUBBASE

Work under this item shall conform to the requirements of Section 2.12 of the Standard Specifications amended as follows:

2.12.02 – Materials: *Replace the paragraph with the following:*

All materials for this work shall meet the requirements of M.02.02 and M.02.06 with the following conditions/exceptions:

Grading “A” shall be used.

Reclaimed Miscellaneous Aggregate will not be accepted.

ITEM #0214100A – COMPACTED GRANULAR FILL

Work under this item shall conform to the requirements of Section 2.14 of the Standard Specifications amended as follows:

2.14.02 – Materials: *Replace the first sentence with the following:*

Granular fill shall meet the requirements of M.02.01 with the following conditions/exceptions:

Reclaimed Miscellaneous Aggregate will not be accepted.

ITEM #0304002A – PROCESSED AGGREGATE BASE

Work under this item shall conform to the requirements of Section 3.04 of the Standard Specifications amended as follows:

3.04.02 – Materials: *Replace the paragraph with the following:*

All materials for this work shall meet the requirements of M.05.01 with the following conditions/exceptions:

Course aggregate shall be broken stone.

Gravel or Reclaimed Miscellaneous Aggregate will not be accepted.

ITEM #0406171A – HMA S0.50

ITEM #0406172A – HMA S0.375

ITEM #0406173A – HMA S0.25

Work under this item shall conform to the requirements of Section 4.06 of the Standard Specifications amended as follows:

4.06.04 – Method of Measurement: *Replace Section 5. Material for Tack Coat with the following:*

Material for Tack Coat will not be measured for payment.

4.06.05 – Basis of Payment: *Delete Section 5 in its entirety and replace with the following:*

There shall be no direct payment for furnishing and installing “Material for Tack Coat”, but the cost thereof including all materials, equipment, tools and labor incidental thereto shall be considered included in the cost for the “HMA S0.50”, HMA S0.375 & “HMA S0.25” items.

ITEM #0406171A
ITEM #0406172A
ITEM #0406173A

ITEM #0406303A – SAWING AND SEALING JOINTS

Description: This work shall consist of sawing bituminous concrete pavement and applying hot-applied asphalt crack sealant to create a sealed pavement joint at the locations specified on the Plans. It shall be constructed in close conformity with the lines, grades, thicknesses, and typical cross sections shown on the Plans or established by the Engineer.

Materials:

1. Crack Seal: The crack seal material shall be composed of a hot-applied asphalt meeting ASTM D6690 Type II requirements.

Prior to the start of work, the Contractor shall submit a Materials Certification (MC) in accordance with Article 1.06.07 certifying the joint seal material meets these requirements. The Contractor must submit to the Engineer all Safety Data Sheets (SDS) from the material manufacturer prior to the commencement of work.

2. Blotting Agent – Detackifier: This material shall be a fine-graded granular material with 100% aggregate passing the 3/16-inch sieve and no more than 5% passing the #200 sieve when tested in accordance with AASHTO T 27 and T 11.

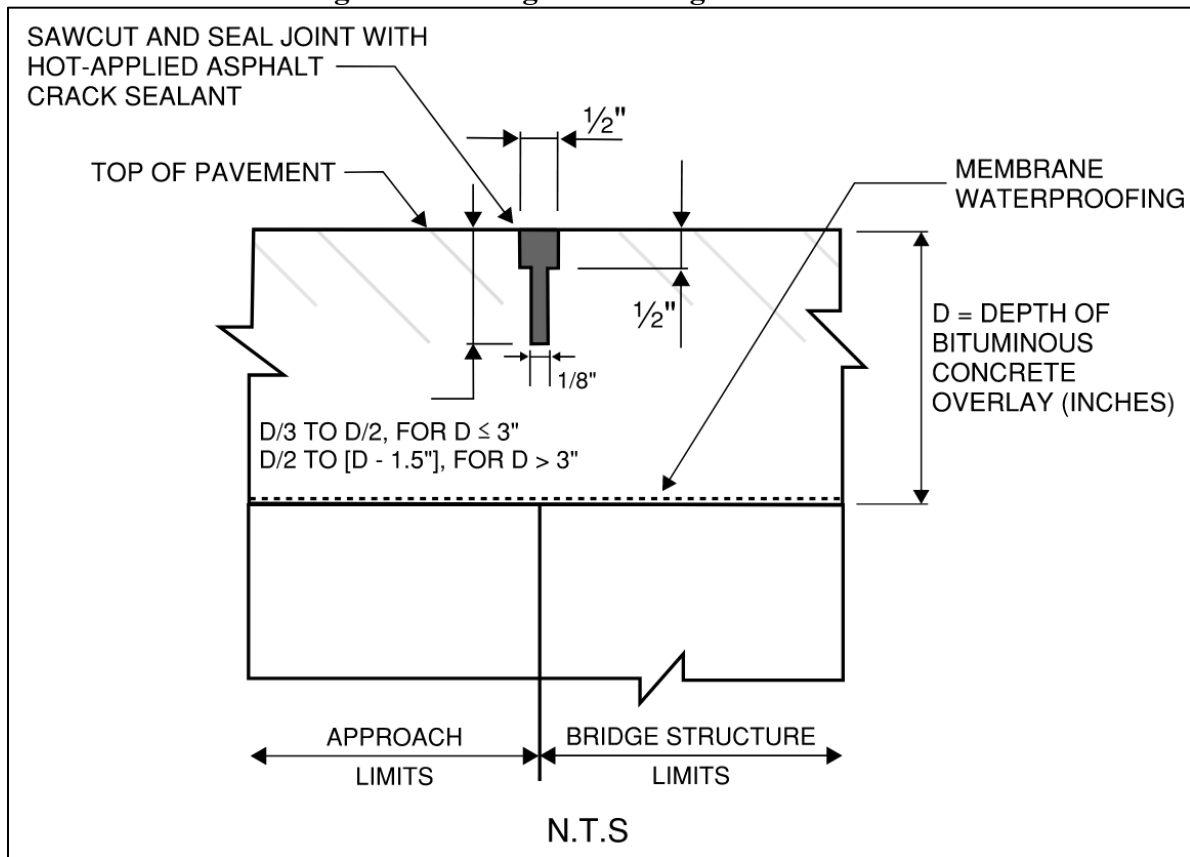
The material shall be one recommended by the supplier of the crack sealant and shall be used as recommended by the supplier, except that no paper, cotton, or other organic materials will be allowed. Information on the type and usage of a detackifier or blotting agent shall be presented to the Engineer for their written acceptance prior to use.

Construction Methods: The sawing and sealing operation shall proceed in accordance with the requirements of the “Maintenance and Protection of Traffic” and “Prosecution and Progress” specifications.

1. Equipment: The equipment used by the Contractor shall include the following:
 - a. Saw and Blades: A minimum of one (1) power saw shall be used for the cutting of bituminous concrete. The saw shall be capable of providing straight, clean cuts of uniform depth and width to the dimensions shown on the Plans. The saw(s) shall be capable of making both a single, deeper cut (for reflective crack control) as well as a wider, shallower cut (to form the upper sealant reservoir), in one single pass, using multiple blades mounted side-by-side in “gang blade” arrangement. The saw shall have diamond-tipped blades.
 - b. Melter Applicator: This shall consist of a boiler kettle equipped with pressure pump, hose, and applicator wand; the boiler kettle may be a combination melter and pressurized applicator of a double-boiler type with space between the inner and outer shells filled with heat transfer oil. Heat transfer oil shall have a flash point of not less than 600°F. The kettle shall include a temperature control indicator. The kettle shall be

- capable of maintaining the crack seal material at the manufacturer's specified application temperature range. The kettle shall include an insulated applicator hose and application wand. The hose shall be equipped with a shutoff control. The kettle shall include a mechanical full sweep agitator to provide continuous blending. Thermometers shall monitor the material temperature and the heating oil temperature. Thermostatic controls shall allow the operator to regulate material temperature up to at least 425°F.
- c. **Application Wand and Squeegee Applicator:** The material shall be applied with a wand followed by a squeegee applicator. The squeegee applicator shall be of commercial/industrial quality designed with a "U" shaped configuration. It shall be of a size adequate to strike off, flush with the surrounding pavement surface and without overflow around the sides, all crack seal material placed. This tool shall be either attached to the applicator wand or be a separate long handled tool.
 - d. **Hot Air Lance:** This shall be designed for cleaning and drying the pavement saw cuts. Minimum compressed air capacity shall be 100 psi. The compressed air emitted from the tip of the lance shall be oil free and capable of achieving a temperature of at least 1500°F.
2. **Weather Requirements:** Work shall be performed only when the pavement is dry. No frost, snow, ice, or standing water may be present on the roadway surface or within the pavement saw cuts. The ambient temperature must be at least 40°F during field application operations.
 3. **Material Mixing Procedure:** The prepackaged material shall be added to the melter applicator in the presence of the Engineer. It shall then be mixed and heated to the recommended application temperature. The crack sealant shall never exceed 400°F.
 4. **Delineation of Transverse Joints:** Prior to the sawing and sealing operation, the Contractor shall establish sufficient controls to determine the exact location of each transverse joint. This shall include setting markers at each joint to reference its location and alignment, while having each of these markers tied. Survey shall be established while the joint elements are exposed and must be done before placement of the proposed pavement, base, or other fill materials. A written procedure for this work shall be submitted to the Engineer for review prior to commencement.
 5. **Cutting of Bituminous Concrete:** Saw cutting shall be performed a minimum of 48 hours and a maximum of 5 days after the surface lift of the bituminous concrete overlay is placed. After final paving is completed, the proposed saw cut lines shall be marked on the overlay by the Contractor. The saw cut lines must be approved by the Engineer before performing the work.

The joint shall consist of a gang-blade saw cut made in a single pass and shall span from edge-of-road to edge-of-road, as shown on the Plans. The cuts shall be made using blades of appropriate thickness to achieve the joint detail shown in Figure 1.

Figure 1: Sawing and Sealing – Joint Detail

The inner 1/8-inch-wide cut shall be made in a straight line across the pavement directly over the transverse joint. For total bituminous concrete overlay depths of 3 inches and less, the depth of the inner saw cut shall be between one third ($D/3$) and one half ($D/2$) the specified depth of the overlay as shown on the Plans. For total overlay depths exceeding 3 inches, the minimum required depth of the inner saw cut shall be one half ($D/2$) the specified depth of the bituminous concrete overlay as shown on the Plans, and a maximum of 1.5 inches above the bottom of the overlay ($D - 1.5$). The saw cut shall not damage or impact any portion of the membrane waterproofing, bridge deck, joint, or other structural element.

The outer cuts shall be made using a gang blade arrangement within the same pass as the inner cut to form the 1/2-inch by 1/2-inch upper reservoir and properly support the installation of the sealant.

The saw cut shall provide straight, clean vertical faces with no cracking, tearing, or breakage along the cut edge.

6. **Saw Cut Preparation:** Saw cuts to be sealed shall be treated with a hot air lance immediately prior to application of the crack seal material. Two (2) passes minimum shall be made with the hot air lance. There shall be no more than 10 minutes between the second hot air lance treatment and the material application.

The use of the hot air lance is not intended to heat the saw cut. It is to be used to blow all debris from the saw cut to the depths specified below and to remove any latent moisture from the saw cut until the inside of the saw cut is completely dry as determined by the Engineer. "Moisture" does not include standing water. The hot air lance is not to be used to boil off or blow standing water from the bottom of a saw cut. If standing water is present in the bottom of any saw cut, the sealing operation shall be postponed until such time that the standing water evaporates naturally. The Contractor may use compressed, oil-free air (not heated) to blow standing water from a saw cut to help accelerate the natural evaporation process. If standing water remains after using compressed air, the saw cut shall be allowed to dry naturally until remaining standing water evaporates. The hot air lance shall be used after visible water has evaporated. If a saw cut is already completely dry as determined by the Engineer, the hot air lance shall be operated at its lowest temperature possible.

7. Crack Sealing: Immediately after saw cuts have been prepared, they shall be filled to refusal along their entire length with the crack sealant material. The treatment material shall be maintained at the manufacturer's specified/recommended application temperature range at all times. The sealing operation shall be suspended if the temperature of the crack seal material falls outside the specified temperature range and shall remain suspended until the crack seal material is brought within the specified range.

Sealed saw cuts shall be squeegeed immediately following application of the crack sealant material, striking the excess even with the adjacent pavement surface. There shall be no build-up of treatment material above or adjacent to the crack. If the initial application of crack sealant material fails to fill the saw cut or shrinks upon cooling with a depression of 1/8 inch or greater, a second application of sealant shall be placed. Care shall be taken during the sealing operation to ensure that overfilling and spilling of material is avoided.

8. Protection of Sealed Joints: Traffic shall not be permitted on the pavement until the crack seal material is set, so that the material does not deform or track and be pulled out by tires. If work under this item is not followed by placement of an overlay of any kind, a detackifier or blotting agent shall be used. If the work under this item is being performed prior to placing a surface treatment (e.g., chip seal), a detackifier or blotting agent will not be allowed.
9. Removal and Disposal of Material: All debris generated from the operations described above shall be removed by the Contractor. Treatment material remaining in the Contractor's kettle at the end of the work shift shall be discarded. Treatment material shall not be re-heated for use in subsequent crack sealing applications unless permitted by the Engineer. All debris and surplus treatment material shall be properly disposed of in accordance with Article 1.10.03 and State of Connecticut regulations.
10. Acceptance of Work: When work is complete, an inspection shall be scheduled. The Engineer will note all deficiencies including areas exhibiting adhesion failure, cohesion failure, tracking of sealant material, locations of missing, incompletely, or incorrectly constructed joints, or other factors that show the work is not acceptable. Work identified by the Engineer as not acceptable shall be repaired at the Contractor's expense. The Contractor shall notify the Engineer upon completion of any corrective work performed.

Any reflective cracking attributable to improper joint referencing or construction methods shall be repaired at the expense of the Contractor, in a manner approved by the Engineer.

Method of Measurement: This work will be measured by the total number of linear feet of sawn and sealed joints, verified and accepted by the Engineer.

Basis of Payment: This work will be paid for at the Contract unit price per linear foot for “Sawing and Sealing Joints” complete and accepted in place. The price shall include all submittals, materials, equipment, tools, and labor incidental thereto. No payment will be made to the Contractor prior to submittal of required documents.

Pay Item	Pay Unit
Sawing and Sealing Joints	l.f.

ITEM #0503866A – REMOVAL OF EXISTING CULVERT

Work under this item shall conform to the requirements of Section 5.03 of the Standard Specifications amended as follows:

5.03.01 - Description: *Delete Paragraph and add the following:*

This work shall include the full removal and disposal of existing reinforced concrete pipe culverts as indicated on the plans.

5.03.03 – Construction Methods:

1. **Submittals.** *Delete Paragraph and add the following:*

The Contractor shall prepare and submit written procedures and working drawings for removal, in accordance with 1.05.02. The submittal shall address the following:

- proposed equipment and removal method(s)
- operating and storage location(s) of equipment and materials
- containment and disposal of debris

5.03.05 - Basis of Payment: *Replace the first paragraph with the following:*

This work shall be paid for at the contract lump sum price for "Removal of Existing Culvert", which price shall include disposal of material and all materials, equipment, tools, and labor incidental to the removal and disposal of the culvert.

<u>Pay Item</u>	<u>Pay Unit</u>
Removal of Existing Culvert	LS

ITEM #0601062A – FOOTING CONCRETE

ITEM #0601064A – ABUTMENT AND WALL CONCRETE

ITEM #0601121A – HEADWALL CONCRETE

Work under this item shall conform to the requirements of Section 6.01 of the Standard Specifications amended as follows:

6.01.03 – Construction Methods: *Replace the first paragraph and subparagraph (a) of Subsection 4. Acceptance Testing and Test Specimens with the following:*

4. Acceptance Testing and Test Specimens: The Contractor shall furnish the facilities and concrete required for sampling, transport to the testing location in the field, performing field testing and for casting sample cylinders for compressive-strength determinations. The number of specimens required will be determined by the Engineer.

(a) Temperature, Air Content and Slump: Field testing in accordance with AASHTO T 23, “Making and Curing Concrete Test Specimens in the Field” by an ACI Concrete Field-Testing Technician Grade I or higher and will be performed at the point of placement and at a frequency determined by the Engineer. Representatives of the Engineer will witness the testing.

(b) Acceptance Testing and Compressive Strength Specimens: Concrete samples are to be taken at the point of placement into the forms or molds.

Standard Mix Class	Air Content	Slump	Concrete Temperature
PCC0334Z (3300 psi)	6.0 +/- 1.5%	See Note 3	60°-90°F
PCC0336Z (3300 psi)	6.0 +/- 1.5%	See Note 3	60°-90°F
PCC0446Z (4400 psi)	6.0 +/- 1.5%	See Note 3	60°-90°F
Modified Standards ¹	6.0 +/- 1.5% ²	See Note 3	60°-90°F
Special Provision Mix ³	As specified	As Specified	60°-90°F

1. Modifications to Standard Mixes, including mixed placed by pumping, shall be reviewed by the Engineer prior to use. These include but are not limited to the use of chemical admixtures such as high range water reducing (HRWR) admixtures and the use of coarse aggregate sizes for that class not specified in M.03

2. If the only modification is the addition of HRWR, the maximum allowable slump shall be 7 inches.

3. Slump must be consistent with the workability required for proper placement of the concrete taking into account the minimum concrete cover and design clearances between surfaces or obstructions within the forms.

4. All concrete mixes with a mix design strength not shown in the table must be approved by the Engineer on a case-by-case basis. Limits on the plastic properties and strength requirements of these mixes are listed in the Specifications.

ITEM #0601062A
ITEM #0601064A
ITEM #0601121A

The Contractor shall provide and maintain facilities on the Project Site, acceptable to the Engineer, for sampling, transporting the initial sample, casting, safe storage and initial curing of the concrete test specimens as required by AASHTO T 23. This shall include but not be limited to a sampling receptacle, a means of transport of the initial concrete sample from the location of the concrete placement to the testing location, a level and protected area of adequate size to perform testing, and a specimen storage container capable of maintaining the temperature and moisture requirements for initial curing of Acceptance specimens. The distance from the location of concrete placement to the location of testing and initial curing shall be 100 feet or less, unless otherwise approved by the Engineer.

The specimen storage container described in this section is in addition to the concrete cylinder curing box provided for elsewhere in the Contract.

6.01.05 – Basis of Payment: *Replace the last paragraph of Subsection 1. Concrete with the following:*

This material will be paid for at the Contract unit price per cubic yard less any adjustments, for the specified class or classes, complete in place, which price shall include all materials, equipment, tools, labor and work incidental thereto, including testing, heating, all admixtures, joint sealer, roofing felt and any miscellaneous materials such as metal flashing and metal used in expansion joints and bearings.

ITEM #0601062A
ITEM #0601064A
ITEM #0601121A

ITEM #0601088A - CONCRETE FORM LINERS

Description: Work under this item shall include construction of textured, colored formed concrete surfaces using simulated stone form liners, and a color stain system designed to closely duplicate the appearance of natural stone and the existing stone masonry dam. This item shall include, but not be limited to the following:

- 1) Furnishing, installing, and removing a concrete form liner that will be used to produce a simulated stone facing on exposed surfaces of wingwalls, retaining walls and approach walls, and to the limits shown on the contract documents or requested by the engineer.
- 2) Grouting, patching and hand or tool finishing work after the forms are removed as necessary to remove lines and irregularities on the finished facing that are not in keeping with the intended “look” of the simulated stone facing.
- 3) Color staining of the concrete surfaces as may be required by the style of simulated stone facing used, including test panels to establish colors and patterns of staining before initiating this portion of the work.
- 4) Preparation, submittal and approval of pattern layout drawings, maximizing re-use and minimizing cutting of form liners, for each wingwall and headwall, or other surface where form liners are to be used.

Materials: Acceptable concrete form liner manufacturers and form liner patterns are:

- Custom Rock Formliners, as manufactured by Custom Rock International, Inc., St. Paul, MN 55116, (800) 637-2447. Pattern: No. 2209 – New England Drystack
- Fitzgerald Formliners, as manufactured by Fitzgerald Formliners, 1500 East Chestnut Street, Santa Ana CA 92701, (800) 547-7760. Pattern: No. 17033 – Sierra Drystack
- Spec Formliners as manufactured by Spec Formliners, Inc., 1038 E 4th Street, Santa Ana, CA 92701, (888) 429-9550. Pattern: No. 1587 – California Dry Stack
- An equal form liner approved by the Engineer, which conforms to the parameters and is of similar appearance to the patterns of the above.

Form Liners - The form liners shall be reusable, made of high strength urethane and not compress more than ¼” when concrete is placed at a rate of 10 vertical feet per hour. Form liners shall be removable without causing deterioration of surface or underlying concrete.

Release Agent - The release agent shall be compatible with the form liners, simulated stone masonry and with the color stain system, as recommended by the manufacturer.

Form Ties - The form ties shall be designed to separate at least one inch back from the finished surface, leaving only a neat hole that can be plugged with patching material.

Color Stain - Special penetrating stain mix as provided by the manufacturer, shall achieve color variations present in the natural stone being simulated by the pattern selected for the project. The Engineer shall select a color pattern from photos of completed projects. The stain shall create a surface finish that is breathable (allowing water vapor transmission), and that resists deterioration from water, alkali, fungi, sunlight or weathering. The stain shall be a water borne, low V.O.C. material less than 11.25 lb/cf and shall meet requirements for; weathering resistance - 2000 hours accelerated exposure in accordance with the 3-bulb test of ASTM G23, scrub test - 100 revolutions, abrasion resistance (Tabor CF-10) - 500 cycles, adhesion – 0.04” cross cuts on glass pass 3 or higher on a scale of 1 to 5 in accordance with ASTM D3359, chemical resistance - ASTM D1308.

Construction Methods: General: The manufacturer of the simulated stone form liners and custom coloring systems shall demonstrate at least three (3) years of experience making custom simulated stone form liners and color stains to create formed concrete surfaces to match natural stone shapes, surface textures and colors. Evidence and color pictures of projects actually constructed over the last five years shall be submitted prior to approval.

The contractor or subcontractor who is to install the form liners and perform the work shall demonstrate at least three (3) years of experience placing vertically formed architectural concrete, including training in the manufacturer’s special techniques as may be required in achieving realistic surfaces.

An authorized representative from both the form liner manufacturer and the color stain manufacturer (if color stain is used) shall be present at the site for installation of the facing test panel and during placing of all structural concrete utilizing form liners.

Prior to initiating any work, a meeting shall be scheduled by the contractor to assure full understanding of the work by all parties involved and to coordinate the work. Included for attendance shall be the manufacturer’s authorized representatives, the contractor, the subcontractor (installer), the Engineer and the Town.

The Contractor shall submit the following for approval by the Engineer prior to beginning the form operations:

Photographs - Color photographs of at least three (3) similar projects recently performed by the contractor (or his subcontractor) and at least three (3) similar projects recently produced by the manufacturer.

Form Tie Sample - A sample, description, and demonstration of the form tie the Contractor proposes to use.

Pattern Layout Drawings (3 copies) - Layout drawings shall be the plan, elevation, and details showing the overall pattern, joint locations, form tie locations, weephole locations, drainage and other protrusions, and any other special considerations. These drawings shall maximize re-use of form liners and minimize cutting of form liners and shall be approved prior to installation of the form liners.

Concrete Facing Test Panel - At least 30 days prior to placing structural concrete requiring form liners, a concrete test panel shall be built on-site, using the same materials and methods of work force that will be used for the project. Location of the test panel shall be approved by the Engineer and the concrete test panel shall conform to the following:

1. The size of the test panel shall be 5 square yards, or larger if needed to adequately illustrate the pattern selected.
2. The test pattern shall contain an area demonstrating simulated stone masonry butt joint, the continuation of the pattern through an expansion joint and an outside corner.
3. The test panel shall include staining as may be required for the selected pattern.
4. The test panel shall be removed when it is no longer needed, to the satisfaction of the Engineer.

The test panel requirement may be waived, if in the opinion of the engineer, all parties involved adequately understand the requirements and the intended look of the final finished surfaces.

All work associated with the process of form lining, texturing and color staining of the hardened concrete shall be performed in strict accordance with the manufacturer's recommendations and as approved by the Engineer. The contractor shall:

- Provide, cut and install the form liners in accordance with the approved pattern drawings for each structural component
- Provide and apply manufacturer's release agent
- Hand carve top exposed texture surfaces (as applicable)
- Remove form liner after concrete is sufficiently set to avoid damage
- Patch, grind or brush hammer form liner seams as required
- Power wash hardened concrete just prior to staining
- Power wash and patch form liners as may be required before re-use

Form Liners: Design and pattern of the form lined concrete surfaces shall follow the manufacturer's standard drawing and the approved pattern layout drawings. The completed color and formed concrete surfaces shall match the pattern, color and texture of the approved test panel and shall accurately simulate the appearance of real stone, demonstrating the colors that may be apparent due to aging, rusting, and staining from oxidation, soil and/or vegetation.

All form liners shall be placed with less than 1/4" separation between form liners. Form liners shall be securely attached to the forms with wood or sheet metal screws, securely bolted through the forms with bolts secured into threaded inserts in the back of the form liners, or securely bolted through the form liner and forming system with flat head bolts inserted in a pattern joint, all according to manufacturer's recommendations for the pattern and form liner used. Construction adhesives may be used but not on re-usable form liners.

Release of Form Liners: Only manufacturer recommended form release agents shall be utilized and shall be applied to the form liners before the concrete is placed. Release agents shall be applied in strict accordance with release agent manufacturer recommendations. Hand-charged sprayers will only be allowed if a thin uniform coating of release agent is obtained on the form liner.

Form liners shall be removed from the wall within 24 hours of placing the concrete. The form liners may be detached from the forms and then removed from the concrete, or they may remain attached to the forms and the entire forming system removed from the concrete. Remove the form liners from the top, down. Curing of concrete may be accomplished with form liners and forms placed back against the wall after the initial detachment. **Curing compounds shall not be used**, as they are incompatible with the color staining material.

Care & Cleaning of Form Liners: Form liners shall be cleaned the same day they are removed from the wall with a power wash and mild detergent. Synthetic brushes with stiff bristles may be used on stubborn areas. Mild acid washes may also be used. **Solvents shall not be used**. If necessary, patching of holes shall be performed with 100% clear silicone caulk. Form liners shall be stored inside or under a protective, non-transparent cover, in a vertical position.

Wall Patching and Preparation: After form liners are removed from the hardened concrete, the textured uncolored surface shall be prepared for color staining. All holes larger than 3/8" in greatest principal dimension shall be filled with concrete patching material from the approved product list, as approved by the Engineer. All honeycombed areas shall be filled and textured to match surrounding areas. Seam lines and other unnatural protrusions shall be ground down to match adjacent areas with a hand-held power grinder using discs made for concrete. Grinding of seams shall be performed immediately after removal of the form liners. Perform final bush hammering to blend defects and ground areas into the final rock texture. In particular, the process of wall patching and preparation shall be subject to approval of the manufacturer and Engineer.

Color Staining: All color staining shall be performed by the manufacturer, or his authorized representative, and the hardened concrete shall be a minimum of 30 days old before color staining is applied. The Contractor shall power wash the wall to free it from latent, dirt, oil and other objectionable materials. After the wall has dried, the color staining process is applied using colors approved by the Engineer. Color staining shall be applied in such a way that the stones shall have individual colorations from one to the other. Water-based stains shall be used in air temperatures ranging from 50 degrees F to 100 degrees F. Solvent-based stains shall be used in air temperatures of 50 degrees F and below, but in no case when the temperature of the hardened concrete is 40 degrees F and falling.

All staining work shall be scheduled after backfilling is completed to avoid contaminating or damaging of the surfaces. After staining is complete and approved, topsoil and rip rap shall be placed in a way that does not damage the finished surfaces.

Method of Measurement:

The portion of the work covered under this special provision and associated with construction of textured and colored formed concrete surfaces using simulated stone form liners and a color stain system, shall be measured for payment by the actual number of square feet of concrete patterned on cast-in-place concrete surfaces, within the pay limits shown on the drawings or as approved by the Engineer.

Basis of Payment:

This work shall be paid for at the contract unit price per square feet for "Concrete Form Liners", complete in place, which price shall include all work and materials incidental thereto, including form liners, release agents, form ties, color stains or additives, pattern drawings, test panels, scaffolding, patching, preparation, cleaning, staining and all other work, materials, tools, and labor incidental thereto.

Pay Item

Concrete Form Liners

Pay Unit

S.F.

ITEM #0601125A – PRECAST CONCRETE BOX CULVERT

Description: Work under this item consists of furnishing and installing a precast concrete box culvert(s) as shown on the plans and as ordered by the Engineer. This item also includes all hardware, inserts, dowels for connections, reinforcing steel and joint materials as shown on the plans.

Materials:

- The concrete mix design shall meet the requirements of M.03.02, Class PCC05562, and shall be submitted to the Engineer.
- All reinforcing steel, including dowel bar mechanical connectors, shall be galvanized and shall meet the requirements of M.06.01.
- All threaded concrete inserts, lifting fixtures, and miscellaneous hardware cast into precast concrete components shall be galvanized in accordance with ASTM A153 or ASTM B695 Grade 50. All portions of the lifting and seating devices shall be recessed from the finished concrete surface.
- Non-shrink grout shall meet the requirements of M.03.05 and be suitable for submerged applications.
- Gaskets shall meet the requirements of ASTM D1056, C1677 or C990.
- Geotextiles shall be the “Separation (High Survivability)” type and shall be selected from the Department’s Qualified Product List.
- Dampproofing shall meet the requirements of M.12.05.

Construction Methods:

1. Design and Load Rating:

The box culvert shall be fabricated in accordance with the lines, grades, dimensions and details shown on the plans. Should the fabricator propose any deviations from the lines, grades, dimensions and details shown on the plans, the Contractor shall include in his submittals design calculations and a load rating package.

The design of the precast concrete box culvert(s) shall meet the requirements of the latest edition of the AASHTO LRFD Bridge Design Specifications, including interim specifications, available prior to the advertising date of the contract, as supplemented by ASTM C1433 and amended as follows:

- Unless otherwise shown on the plans, the precast concrete box culvert sections shall achieve a minimum load rating factor of 1.20 for all design, legal, and permit vehicle loads in accordance with CTDOT Bridge Load Rating Manual.

(<https://portal.ct.gov/DOT/State-Bridge-Design/Load-Rating/Load-Rating>).

- The maximum allowable deflection of the precast concrete box culvert sections due to the design vehicle live load shall be no greater than 1/800 of the span (clear distance between the inside face of walls).
- Design the precast concrete box culvert sections for all construction load affects that may be applied during all stages/phases of construction.
- The minimum thickness of the roof, and walls of the precast concrete box culvert sections shall be no less than 8 inches, unless otherwise noted on the plans. The thickness of the roof of the box culvert sections at the inlet and outlet may be governed by the development of the reinforcement required to connect the spandrel wall to the box culvert.
- The concrete cover over the reinforcement on any surface of the roof, and walls of the precast concrete box culvert sections shall be 2 inches, unless otherwise noted on the plans.
- The reinforcement spacing to control cracking shall be based on Class 2 exposure conditions.
- The precast end units shall be capable of resisting impact loads in accordance with AASHTO criteria for design loads for TL-3 railings.

2. Submittals

(a) Working Drawings Submittal: The Contractor shall submit an individually packaged set of working drawings for each precast box culvert location to the Engineer for review in accordance with 1.05.02. Each package shall include working drawings, with all details and documents necessary for fabrication and erection, and shall address all unique culvert sections and loading conditions. The package shall include the following:

- Title sheet
- Table of contents
- Contact information for designer and fabricator – contact information shall include name and address of each firm and the name of contact person with phone number and email address
- Precast concrete box culvert working drawings

The drawings shall include complete details of the precast concrete box culvert sections and connections for the cut-off wall, nosing and closure pours where shown on the plans. The drawings shall include, but not be limited to, the following:

- Project number, town and crossing
- Bridge number, when shown on the plans

- Layout plan of the precast concrete box culverts. The plan shall include the dimensions of each box culvert section. The Contractor shall determine that the length of each box culvert section, including all tolerances, satisfies the stages of construction, sequence of construction, and construction methodology shown on the plans.
- Plan indicating sequence of erection and stage construction of precast concrete box culvert sections.
- Plans and cross-sections of the box culvert sections detailing the length, width, height and thickness of wall, floor and roof slabs.
- Type, size, location and spacing of steel reinforcing, mechanical connectors and concrete inserts for anchoring threaded deformed steel bars, bending diagrams, material lists and catalog cuts for mechanical connectors and inserts as applicable.
- Type, size and location of fixtures and lifting holes.
- Location and size of all holes to be cast and additional reinforcement as required.
- Type, size and location of joints, gaskets and additional steel reinforcement.
- Material specification designations for all components.

(b) Design Computations Submittal (Required for deviations from the plans): The Contractor shall submit an individually packaged set of design computations for each precast box culvert location to the Engineer for review in accordance with 1.05.02. Each package shall include computations and documents necessary for fabrication and erection, and shall address all unique culvert sections and loading conditions. The package shall include the following:

- Project number, town and crossing
- Bridge number, if applicable
- References to design specifications, including interim specifications
- Diagrams identifying all members and load conditions and combinations
- Descriptions for each notation used, and references to applicable specification sections and articles
- Bending moment and shear diagrams
- Section specific computations for box culvert sections
- Computations for reinforcing development and splice lengths and diagrams identifying splice locations

- Complete tabulated results from **all** load conditions and load combinations including shipping, handling, and erection
- (c) **Load Rating Submittals (Required for deviations from the plans):** The Contractor shall submit an individually packaged load rating report(s) for each precast box culvert location to the Engineer for review in accordance with 1.05.02 and the CTDOT Bridge Load Rating Manual.
- (d) **Working Drawings - Lifting and Seating Devices:** Prior to fabrication, the Contractor shall submit working drawings and supporting computations for the embedded lifting and seating devices required for the handling and installation of the precast concrete components at each box culvert location to the Engineer for review in accordance with 1.05.02. Prior to applying load to the embedded devices, the concrete shall attain the minimum concrete compressive strength associated with the safe working load of the device.
- (e) **Working Drawings - Installation of Precast Concrete Components:** Prior to installation of the precast concrete components, the Contractor shall submit working drawings and supporting computations for the lifting and placement of the precast concrete components, to the Engineer for review in accordance with 1.05.02. Cranes shall be operated in accordance with the Connecticut Department of Public Safety regulations. The Contractor shall be responsible for verifying the weight of each lift. The working drawing submittal shall include, but not be limited to the following:
- Plan of the work area showing all structures, roads, railroad tracks, Federal and State regulated areas as depicted on the plans, overhead and subsurface utilities, property lines, or any other information relative to erection. No picks shall be allowed over vehicular, pedestrian, railway or vessel traffic.
 - A detailed narrative describing the lifting and installation sequence.
 - Manufacturer's data sheet for the crane(s) including the load/capacity chart. The capacity of the crane shall be adequate for the total lift/pick load including rigging, spreaders and other materials. In the area of railroads and navigable waterways, the capacity shall be as required by the regulatory authorities.
 - Manufacturer's data sheets and product data sheets for all rigging (slings, spreader bars, blocks, etc.), lifting devices, and other connecting equipment and hardware listing the number, type, size, arrangement and capacity of each.
 - Location of each crane for each pick.
 - Crane support measures, including any support beneath the outriggers such as bearing pads, crane mats, planking or special decking, or other means to transfer the crane's total weight (including the lifted load) into the earth or structure beneath it.
 - Delivery location of each component.
 - Boom length and the lift and setting radius for each pick (or maximum lift radius).
 - Pick point location(s) on each component.

- Lifting weight of each component including rigging (clamps, spreader beams, etc.)

(f) Product Data – Field Installed Materials: Prior to installation of the precast concrete components, the Contractor shall submit product data for field installed materials, such as non-shrink grout, geotextile, etc., not addressed in other submissions to the Engineer for review in accordance with 1.05.02.

2. Fabrication and Manufacture: The fabrication and manufacture of the precast concrete components shall meet the requirements of M.08.02-4 as supplemented by the following:

- (a) Reinforcing Steel:** Reinforcing steel shall be fabricated and installed in accordance with Articles 6.02.03-2 through 6.02.03-5. The welding of reinforcement is not permitted.
- (b) Test Cylinders:** During the casting of the components, the Contractor shall cast a minimum of four 4 inch × 6 inch test cylinders in accordance with AASHTO T23 during each production run. Cylinders shall be cured under the requirements of ASTM C31 and shall be used to confirm that the concrete meets the requirements of M.03.02.
- (c) Placing Concrete:** Concrete shall not be deposited in the forms until the Contractor has inspected the reinforcing steel, including all other embedded components, and has documented such inspection.

Concrete shall not be deposited into the forms when the ambient temperature is below 40°F or above 100°F, unless adequate heating or cooling procedures have been previously approved by the Engineer. The concrete temperature shall be 60°F to 90°F at the time of placement.

Truck-mixed or transit-mixed concrete will not be allowed.

Production during the winter season, from November 15 to March 15 inclusive, will be permitted only on beds located in a completely enclosed structure of suitable size and dimension that provides a controlled atmosphere for the protection of the casting operation and the product.

Outside concreting operations will not be permitted during rainfall unless the operation is completely under cover.

The concrete shall be vibrated internally, or externally, or both, as needed to provide adequate flow and consolidation of the concrete. The vibration shall be provided in such a manner as to avoid displacement of reinforcing steel, forms, or other components. There shall be no interruption in the placement of concrete. Concrete shall be placed and vibrated sufficiently to produce a surface free from imperfections such as honeycombing, segregation, cracking, or checking.

Any deficiencies noted in the components may be cause for rejection.

- (d) Finishing:** All fins, runs, or mortar shall be removed from the concrete surfaces which will remain exposed. Form marks on exposed surfaces shall be smoothed by grinding. All exposed, outside concrete surfaces shall be given a grout clean-down finish in accordance with 6.01.03-10.

- (e) **Handling and Storage:** Any precast concrete components damaged during storage, transportation or handling shall be repaired or replaced by the Contractor, at its own expense, as directed by the Engineer.
 - (f) **Repairs:** The Contractor shall submit to the Engineer, for review, any proposed methods or materials to be used in the repair of precast concrete components or defective surfaces. Precast concrete components with defective area greater than 10% as determined by the Engineer will be rejected.
- 3. Fabrication Tolerances:** Tolerances of forming precast concrete box sections shall be as follows:
- (a) **Internal Dimensions:** The internal dimensions shall be within 1% of the design dimensions or within 1 1/2 inches, whichever is less.
 - (b) **Roof, Floor and Wall Thickness:** The roof, floor and wall thickness shall be within 1/4 inch of the thicknesses shown in the design.
 - (c) **Laying Length of Opposite Surfaces:** Variations in laying lengths of two opposite surfaces of the box section shall be less than 1/8 inch/foot of internal span up to 3/4 inch maximum.
 - (d) **Length of Section:** The length of a section shall not vary from the designed length by more than 1/2 inch in any box section.
- 4. Pre-assembly of Box Sections:** Box sections shall conform to all dimensions within tolerances specified herein. Adjacent sections shall be assembled without a gasket at the manufacturing plant to ensure that all tolerances are met prior to shipping. All sections that will be joined with mechanical connectors shall be pre-assembled, complete with fasteners, to confirm alignment. The Department shall be given at least 2 working days' notice to inspect and evaluate the sections prior to shipping.
- 5. Installation:** The installation of the precast concrete box culvert sections and components shall be in accordance with the plans and the following:
- (a) The installation of the precast concrete box sections shall proceed as required by the sequence of construction, stage construction plans, and the special provisions entitled "Prosecution and Progress" and "Maintenance and Protection of Traffic."
 - (b) Prior to installing the inlet and outlet end box culvert sections, a bed of non-shrink grout shall be placed on the cut-off walls. The end box culvert sections shall be connected to the cut-off wall using galvanized dowels installed in cast or drilled holes and bonded with non-shrink grout.
 - (c) All precast concrete box culvert joints shall be lap joints and shall be sealed with preplaced neoprene gaskets. The joints must provide a water tight fit, and provide good alignment of sections and inside faces. The gasket shall be compressed to a minimum of 1/2 of its uncompressed width. The gasket shall be uniformly compressed along all vertical and horizontal surfaces. A positive means, through the use of seating devices, shall be used for pulling each section against the adjacent section to assure an adequate

silt-tight joint. Details for the seating method shall be submitted to the Engineer for review. The lap joints shall be seated such that they make a continuous line of precast concrete box culvert sections with a smooth interior, free from irregularities in the invert line.

- (d) The joint opening between adjacent seated sections on all interior surfaces of the culvert shall be uniform and match the width shown on the plans. The interior surfaces on either side of the lap joints of the adjacent seated sections shall form a smooth and continuous plane, free from irregularities.
- (e) After its installation, any precast concrete box culvert section, as determined by the Engineer, not acceptable in vertical or horizontal alignment for any reason, including but not limited to settlement, displacement, excess camber or misfit, shall be removed by the Contractor and correctly installed, as directed by the Engineer and at the Contractor's expense.
- (f) The lap joints on the exterior of the roof and the interior of the floor and the lap joints on the interior and exterior of the walls (full height on each side) shall be filled with non-shrink grout after seating the sections. The exposed portions of the lap joints within the haunches or fillets on the interior of the culvert sections shall also be filled with non-shrink grout. The non-shrink grout shall be finished smooth and flush with the adjacent concrete surface.

All portions of the lifting and seating devices that extend to or beyond the finished concrete surface shall be removed. All fixtures or holes cast into the sections for lifting or seating shall be completely filled with non-shrink grout and finished smooth and flush with the adjacent concrete surface.

The surface preparation, mixing, placing, curing, and finishing of the non-shrink grout shall follow the written instructions provided by the manufacturer of the grout. The Contractor shall furnish the Engineer with copies of the instructions.

Prior to the passage of flowing water over the with non-shrink grout, the non-shrink grout shall attain a minimum compressive strength of 3,000 psi.

- (g) Geotextile shall be placed on the exterior surface of the roof and walls of the culvert over the lap joints between the culvert sections. The geotextile shall extend 12 inches to each side of the joint and shall be attached to the culvert with silicone caulk.
- (h) The contractor may submit an alternate joint detail for approval by the engineer. Any alternate must provide a water tight fit, and provide good alignment of sections and inside faces

- 6. Erection Tolerances:** The Contractor shall be responsible for ensuring the overall length of the box culvert meets the layout requirements on the plans within all acceptable tolerances as specified in the contract.

Method of Measurement: The work for the precast concrete box culvert will not be measured for payment but will be paid for by the linear foot of precast concrete box culvert as dimensioned on the plans along each box culvert cell, completed and accepted.

Basis of Payment: The work for the precast concrete box culvert will be paid for at the Contract unit price per linear foot for “(Size) Precast Concrete Box Culvert,” completed in place and accepted, which price shall include all equipment, materials, tools and labor incidental to the manufacture, shipping, repair and installation of the precast concrete box culvert of the specified size(s) at the locations shown on the plans.

<u>Pay Item</u>	<u>Pay Unit</u>
(Size) Precast Concrete Box Culvert	l.f.

ITEM #0703031A - ROCK WEIR

Description: Work under this item shall consist of furnishing and placing boulders to create a rock weir within an existing or proposed channel to redirect flow, reduce streambank erosion and improve or create aquatic habitat through the formation of scour pools. This item shall also include maintaining a stockpile of the material on the Site, placement of the stockpiled material in the channel, and the removal and proper disposal of all unused and unacceptable material.

Materials: The individual boulder type and size used shall be as noted on the plans or as directed by the Engineer. The mineral composition and color of the boulders selected shall replicate to the extent possible the existing boulders on-Site.

Individual boulder material for this item shall be sound, durable and free from decomposed stones or other defects impairing durability and shall be resistant to the action of air and water.

Material the Contractor proposes to use must be inspected and approved by the Engineer or their authorized delegate prior to the excavation of existing on-Site material within the Project limits or hauling of material from an off-Site source. The Contractor shall provide the Engineer at least 10 work days' notice for the inspection and approval of the individual boulders.

The following will **NOT** be accepted for vortex boulders/top layer of the weir:

- individual boulders consisting of sandstone, shale, or other rock material prone to disintegration
- boulders with visible cracks or spalling
- rock excavated from ledge (bedrock) formations or broken from larger boulders
- boulders with sharp corners, angular edges, or edges as a result of cutting or crushing operations
- broken concrete.

Footer rocks shall serve as the foundation of the weir. The footer rocks shall have reasonable flat tops and bottoms to enable better placement of the top layer of the weir. Rock excavated from ledge (bedrock) and boulders with sharp corners, angular edges as a result of cutting (quarried stone) are acceptable to use for footer rocks.

The following will **NOT** be accepted for footer rocks:

- individual boulders consisting of sandstone, shale, or other rock material prone to disintegration
- boulders with visible cracks or spalling
- broken concrete

Construction Methods: The Contractor shall submit for the Engineer's approval a proposed location plan for stockpiling the boulders. The proposed location shall be suitable in size and upland of the channel to minimize disruption to the channel or impact to wetland areas caused by moving the materials to and from the stockpile during the placement of material. The stockpile

area shall be prepared in accordance with the “Required Best Management Practices” in Article 1.10.03.

Prior to installation, the Contractor shall stake out the location of the rock weir by indicating each end and the apex, and the Contractor shall notify the Engineer for a field review. The final location will be at the discretion of the Engineer or their authorized delegate.

The Contractor shall provide the Engineer at least 10 work days’ notice prior to initiating the placement of the individual boulders to create a rock weir. The work and placement of the boulders shall be in accordance with the plans or as directed by the Engineer or their authorized delegate. No work on the rock weir will be allowed on-Site without presence of the Engineer or their authorized delegate in order to oversee the construction activities.

Equipment: When placing and maneuvering the individual boulders within the channel or embedding boulders into the streambank, the Contractor shall use an excavator with a bucket and thumb. Any other equipment proposed to be used shall be reviewed and approved in advance by the Engineer or their authorized delegate.

All disturbed areas, including the stockpile area, shall be permanently stabilized using approved erosion and sedimentation control measures and in accordance with the required “Erosion and Sedimentation Control Plan.”

Method of Measurement: This work will be measured for payment by the number of each rock weir installed and accepted, including disposal of unacceptable and surplus materials.

Basis of Payment: This work will be paid for at the Contract unit price each for "Rock Weir," completed and accepted. The price shall include all materials, equipment, tools and labor incidental to the preparation of the stockpile area, excavation of channel bottom, hauling of the material to the stockpile, separation of any rock ledge or concrete debris, and storing and protecting (including sedimentation controls and covering) of excavated material.

Pay Item	Pay Unit
Rock Weir	ea.

ITEM #0707009A - MEMBRANE WATERPROOFING (COLD LIQUID ELASTOMERIC)

Description: Work under this item consists of furnishing and installing a seamless elastomeric waterproofing membrane system applied to a concrete or steel surface as shown on the plans, in accordance with this specification and as directed by the Engineer. Work shall also include conditioning of the surface to be coated and all quality-control testing noted herein.

The completed membrane system shall be comprised of a primer coat, two layers of the membrane coating (minimum total thickness of 80 mil and maximum total thickness not to exceed 120 mil), an additional 40 mil membrane layer with aggregate broadcast into the material while still wet, reinforcing material at deck panel joints and two applications of asphalt emulsion (tack coat) at a rate of 0.05-0.07 gal/s.y. each, allowing the first application to break prior to applying the second.

Materials: The Contractor shall select a waterproofing membrane system from the Department's current Qualified Product List (QPL) for Spray-Applied Membrane Waterproofing System. All materials incorporated in the works shall meet the Manufacturer's specification for the chosen system. The Engineer will reject any system that is not on the QPL.

Reinforcing material shall be as recommended by the manufacturer.

Materials Certificate: The Contractor shall submit to the Engineer a Materials Certificate for the primer, membrane and aggregate in accordance with the requirements of Article 1.06.07.

Construction Methods: At least 30 days prior to installation of the membrane system, the Contractor shall submit to the Engineer a Site-specific Installation Plan that includes the manufacturer's recommended procedure for preparing the deck surface, pre-treatment or preparing at cracks and gaps, treatment at curbs, vertical surfaces or discontinuities, applying the primer and membrane, placing of aggregated coat and all Quality Control (QC Plan) testing operations to be performed during the membrane system's installation. Procedures shall also include recommended repairs of system non-compliant issues identified during application. The system shall be applied to the prepared area(s) as defined or shown in the plans, strictly in accordance with the Installation Plan.

A technical representative, in the direct employ of the manufacturer, shall be present on-Site immediately prior to and during application of the membrane. The representative shall inspect and approve the surface prior to priming, and provide guidance on the handling, mixing and addition of components and observe application of the primer and membrane. The technical representative shall perform all required QC testing and remain on the Project site until the membrane has fully cured.

All QC testing, including verbal direction or observations at the time of installation, shall be recorded and submitted to the Engineer for inclusion in the Project records. The QC testing data

shall be received by the Department's project personnel prior to any paving over the finished membrane, or within 24 hours following completion of any staged portion of the work.

1. **Applicator Approval:** The Contractor's membrane Applicator shall be fully trained and licensed by the membrane manufacturer and shall have successfully completed at least three spray membrane projects in the past five years. The Contractor shall furnish references from those projects, including names of contact persons and the names, addresses and phone numbers of persons who supervised the projects. This information shall be submitted to the Engineer prior to the submittal of the Installation Plan. The Engineer shall have sole authority to determine the adequacy and compliance of the submitted information. Inadequate proof of ability to perform the work will be grounds to reject proposed applicators.

2. **Job Conditions:**

- (a) **Environmental Requirements:** Air and substrate temperatures shall be between 32°F and 104°F and the substrate shall be above the dew point. Outside of this range, the Manufacturer shall be consulted.

The Applicator shall be provided with adequate disposal facilities for nonhazardous waste generated during installation of the membrane system. The applicator shall follow safety instructions regarding respirators and safety equipment.

- (b) **Safety Requirements:** All open flames and spark producing equipment shall be removed from the work area prior to commencement of application.

"No Smoking" signs shall be visibly posted at the Site during application of the membrane waterproofing.

Personnel not involved in membrane application shall be kept out of the work area.

3. **Delivery, Storage and Handling:**

- (a) **Packaging and Shipping:** All components of the membrane system shall be delivered to the Site in the Manufacturer's packaging, clearly identified with the product type and batch number.

- (b) **Storage and Protection:** The Applicator shall be provided with a storage area for all components. The area shall be cool, dry and out of direct sunlight and shall be in accordance with the Manufacturer's recommendations and relevant health and safety regulations.

Copies of Material Safety Data Sheets (MSDS) for all components shall be kept on Site for review by the Engineer or other personnel.

- (c) Shelf Life - Membrane Components: Packaging of all membrane components shall include a shelf life date sealed by the Manufacturer. No membrane components whose shelf life has expired shall be used.

4. Surface Preparation:

- (a) Protection: The Applicator shall be responsible for the protection of equipment and adjacent areas from over spray or other contamination. Parapets and bridge joints shall be masked prior to application of the materials.
- (b) Surface Preparation: Sharp peaks and discontinuities shall be ground smooth. Any peak greater than ¼ inch above the surface profile of the prepared substrate shall be ground to the surrounding elevation. Any valley or minor surface deterioration of ½ inch or greater shall also be repaired. The extent and location of surface patches require the approval of the Engineer before the membrane system is applied.

Surfaces shall be free of oil, grease, curing compounds, loose particles, moss, algae, growth, laitance, friable matter, dirt, bituminous products, and previous waterproofing materials. If required, degreasing shall be done by detergent washing in accordance with ASTM D4258.

The surface shall be abrasively cleaned, in accordance with ASTM D4259, to provide a sound substrate free from laitance.

Voids, honeycombed areas, and blow holes on vertical surfaces shall be repaired as indicated in the Installation Plan.

All steel components to receive membrane waterproofing shall be blast cleaned in accordance with SSPC SP6 and shall be coated with the membrane waterproofing system within the same work shift.

5. Inspection and Testing: Prior to priming of the surface, the Engineer, Applicator and Manufacturer's technical representative shall inspect and approve the prepared substrate.

- (a) Random tests for deck moisture content shall be conducted on the substrate by the Contractor at the Site using a "Sovereign Portable Electronic Moisture Master Meter," a "Tramex CMEXpertII Concrete Moisture Meter" or approved equal. The minimum frequency shall be one test per 1000 s.f. but not less than three tests per shift for each contiguous section worked on during that shift. Additional tests may be required if atmospheric conditions change and retesting of the substrate moisture content is warranted.

The membrane system shall not be installed on substrate with a moisture content greater than 6%, or at a moisture content above the amount recommended by the system's Manufacturer, whichever is less.

- (b) Random tests for adequate tensile bond strength shall be conducted by the Contractor on the substrate using an adhesion tester in accordance with the requirements of ASTM D4541. The minimum frequency shall be one test per 5,000 s.f. but not less than three adhesion tests per shift for each contiguous section worked on during that shift. The locations of the pull tests shall be at least a distance from each other equal to or greater than 1/3 of the width or length (whichever is greater) of the area being worked in that section. The location of the pull tests shall be located in accordance with ASTM D3665 or a statistically-based procedure of stratified random sampling approved by the Engineer.

Adequate surface preparation will be indicated by tensile bond strengths of primer to the substrate greater than or equal to 150 psi or failure in a concrete surface and greater than or equal to 300 psi for steel surfaces.

If the tensile bond strength is lower than the minimum specified, the Engineer may request additional substrate preparation. Any primer not adequately applied shall be removed and new primer applied at the Contractor's expense, as directed by Engineer.

- (c) Grouted joints, materials that the membrane cannot bond to, and cracks or discontinuities that cannot be bridged over by the membrane material shall be covered by a reinforcing material recommended by the membrane system's Manufacturer prior to application of membrane layers as approved or directed by the Engineer.

6. Application:

- (a) The System shall be applied in the following distinct steps as follows:
- 1) Substrate preparation
 - 2) Priming
 - 3) Reinforcing material application over grouted joints, cracks, etc.
 - 4) Membrane application (minimum 2 layers)
 - 5) Membrane with aggregate
- (b) Immediately prior to the application of any components of the System, the surface shall be adequately dry (see Section 5(a) of this specification) and any remaining dust or loose particles shall be removed using clean, dry, oil-free compressed air or industrial vacuum.
- (c) Where the area to be treated is bound by a vertical surface (e.g. curb or wall), the membrane system shall be continued up the vertical, if shown on the plans or directed by the Engineer.
- (d) The handling, mixing and addition of components shall be performed in a safe manner to achieve the desired results, in accordance with the Manufacturer's recommendations or as approved or directed by the Engineer.

- (e) A neat finish with well defined boundaries and straight edges shall be provided by the Applicator.
- (f) Primer: The primer shall consist of one coat with an overall coverage rate of 125 to 175 s.f./gal unless otherwise recommended in the Manufacturer's written instructions.

All components shall be measured and mixed in accordance with the Manufacturer's recommendations.

The primer shall be spray applied using a single component spray system approved for use by the Manufacturer. If required by Site conditions and allowed by the manufacturer brush, squeegee or roller application will be allowed.

The primer shall be allowed to cure tack-free for a minimum of 30 minutes or as required by the Manufacturer's instructions, whichever time is greater, prior to application of the first lift of waterproofing membrane.

Porous concrete (brick) may require a second coat of primer should the first coat be absorbed.

- (g) Membrane and Reinforcing Material: Application of the membrane on the primed surface shall not commence until the primer is cured as described in Section 6(f) of this specification and the adhesion pull tests are completed in accordance with Section 5(b) of this specification.

The waterproofing membrane shall consist of two coats for a total dry film thickness of a minimum 80 mils but not to exceed 120 mils. Adjacent coats shall be of a contrasting color to aid in Quality Assurance and inspection. Any reinforcing material shall be applied immediately before the first coat of membrane in accordance with the Manufacturer's recommendations.

The membrane shall be comprised of Components A and B and a hardener powder which is to be added to Component B in accordance with the Manufacturer's recommendations.

The substrate shall be coated in a methodical manner.

Thickness checks: For each layer, checks for wet film thickness using a gauge pin or standard comb-type thickness gauge shall be carried out once every 100 s.f. Where rapid set time of the membrane does not allow for wet film thickness checks, ultrasonic testing (steel surfaces only), calibrated point-penetrating (destructive) testing, in-situ sampling (cutout of small sections for measuring thicknesses), or other methods approved by the Engineer shall be employed for determination of dry film

thickness. The measured thickness of each and every individual test of the membrane shall be greater than or equal to the required thickness.

Bond Strength: Random tests for adequate tensile bond strength shall be conducted on the membrane in accordance with the requirements of ASTM D4541. The minimum test frequency shall be one test per 5,000 s.f. but no less than three adhesion tests per bridge. Adequate adhesion will be indicated by tensile bond strengths of the membrane to the substrate of greater than or equal to 150 psi or failure in a concrete surface, and greater than or equal to 300 psi for steel surfaces.

Repair the membrane system following destructive testing and correct any deficiencies in the membrane system or substrate noted during QC testing in accordance with the Manufacturer's recommendations to the satisfaction of the Engineer at no additional cost to the State.

- (h) **Repairs:** If an area is left untreated or the membrane becomes damaged, a patch repair shall be carried out to restore the integrity of the system. The damaged areas shall be cut back to sound materials and wiped with solvent (e.g. acetone) up to a width of at least four inches on the periphery, removing any contaminants unless otherwise recommended by the Manufacturer. The substrate shall be primed as necessary, followed by the membrane layers. A continuous layer shall be obtained over the substrate with a four-inch overlap onto existing membrane.

Where the membrane is to be joined to existing cured material, the new application shall overlap the existing by at least four inches. Cleaning and surface preparation on areas to be lapped shall be as recommended in the Manufacturer's written instructions.

- (i) **Aggregated Finish:**
- 1) Apply an additional 40 mil thick layer of the membrane material immediately followed by an aggregate coating, before the membrane cures, at a rate to fully cover the coated area to a point where no membrane material is visible. The membrane and aggregate shall be fully integrated after the aggregate has been applied and the membrane cured.
 - 2) Localized areas not fully coated shall be touched-up with additional membrane and aggregate as needed.
 - 3) Using motorized mechanical sweepers or a vacuum sweeper apparatus, remove all loose and excess aggregate from the surface to the satisfaction of the Engineer and dispose of properly after application prior to allowing traffic onto finished surface or application of tack coat. Any areas not fully coated after sweeping shall be touched up with additional membrane and aggregate as needed.
7. **Final Review:** The Engineer and the Applicator shall jointly review the area(s) over which the completed system has been installed. Any irregularities or other criteria that do not meet the requirements of the Engineer shall be addressed at this time.

Method of Measurement: This item shall be measured by the number of square yards of waterproofed surface completed and accepted.

Basis of Payment: This item will be paid for at the Contract unit price per square yard of “Membrane Waterproofing (Cold Liquid Elastomeric),” complete and accepted in place, which price shall include all surface preparation, furnishing, storing and applying the system, technical representative and Quality Control testing, and any necessary repairs and remediation work as well as all materials, equipment, tools, labor incidental to this work.

Pay Item	Pay Unit
Membrane Waterproofing (Cold Liquid Elastomeric)	s.y.

ITEM #0819002A - PENETRATING SEALER PROTECTIVE COMPOUND

Description: Work under this item shall consist of cleaning concrete surfaces of dirt, dust and debris, and furnishing and applying a clear, penetrating sealer where shown on the plans, to provide a hydrophobic barrier against the intrusion of moisture. This work also includes furnishing, installing and removing platforms, scaffolding, ladders and other means of access as well as shields, as required, to protect adjacent areas from overspray. Penetrating sealer shall not be applied to concrete surfaces that have been previously treated with coatings or curing compounds that would hinder penetration of the sealer into the concrete.

Materials: The penetrating sealer shall be a single component, 100% silane or silane siloxane from the list of materials below. The material shall be selected in anticipation of the expected ambient and surface temperature at the time of installation.

The following products may be used when ambient and surface temperatures are 40°F and above:

SIL-ACT ATS-100 (Silane)
Advanced Chemical Technologies, Inc.
9608 North Robinson Ave.
Oklahoma City, OK 73114
405-843-2585
www.advchemtech.com

Armor SX 5000 EXT-100 or SX 5000 WB (Silane Siloxane)
Foundation Armor, LLC.
472 Amherst St. STE 14
Nashua, NH 03063
866-306-0246
www.foundationarmor.com

Aquinil Plus 100 (Silane)
ChemMasters
300 Edwards Street
Madison, OH 44057
440-428-2105, 800-486-7866
www.chemmasters.net/Aquanil100.php

The following product may be used when ambient and surface temperatures are 20°F and above:

Certi-Vex Penseal 244 100% (Silane)
Vexcon Chemicals
7240 State Road
Philadelphia, PA 19135
888-839-2661
www.Vexcon.com

Construction Methods:

Submittals: The Contractor shall submit to the Engineer Safety Data Sheets (SDS) and product literature for the selected product. The literature shall include written instructions how to apply the product to vertical and horizontal surfaces, and where required, overhead surfaces.

The Contractor shall submit to the Engineer, in accordance with Article 1.05.02, written procedures for cleaning the concrete surfaces. The submittal shall include proposed equipment and materials and shall address how adjacent traffic and other areas shall be protected from dust, debris and overspray during the cleaning and application processes. Where the sealer is to be applied to parapets before pavement is placed, the submittal shall address protecting the deck and curb to which membrane waterproofing will be applied. Should the membrane already be present, the submittal shall address protecting the membrane. It shall also indicate how vegetation shall be protected from overspray. The submittal shall address the conditions under which work may proceed, including wind speed, temperature and precipitation. It shall also include procedures to be followed to protect the work should unfavorable weather conditions occur before the product has been absorbed.

The Contractor shall inspect the surfaces to be sealed to identify surface cleaning needs before submitting the procedures. The Contractor shall identify conditions that need repair or surfaces that may require special attention or cleaning procedures. Such observations shall be addressed in the written procedures.

Surface Preparation: Concrete surfaces to which penetrating sealer will be applied shall be dry, clean and free of grease, oil and other surface contaminants. New concrete and newly placed repair concrete shall be allowed to cure for at least 28 days before applying sealer. After rain or water cleaning, allow existing concrete surfaces to dry for at least 8 hours before applying sealer. Dry surfaces may be cleaned by sweeping with brushes or brooms, and blowing clean with oil-free, compressed air. The Contractor shall take care not to damage the concrete surface finish during cleaning operations. Care shall be taken so that cleaning methods do not damage joint sealant or other components of the structure.

Application: Application of the sealer can only begin after the Engineer evaluates the concrete surfaces for cleanliness and moisture, and determines that conditions are appropriate for application.

The sealer shall saturate the concrete surface with a rate of application of 200 square feet per gallon of sealer. The dispersion shall run six to eight inches down a vertical surface from the spray pattern. The maximum run-down is 12 inches. The Contractor shall monitor and record the number of square feet per gallon of sealer used to verify that the required application rate is being met. Additional sealer may be needed if surfaces are porous, rough or textured.

The Engineer will inspect the concrete surface during application and after the sealer has had adequate time to penetrate. As a test, water sprayed from a bottle on the sealed surface shall bead up and not be absorbed. Should water be absorbed into the concrete at a test area, additional areas shall be tested to determine which areas should receive additional application of sealer. The

Contractor shall apply additional sealer to the identified areas until absorption of water is prevented.

Method of Measurement: This work will be measured for payment by the actual number of square yards of concrete, coated completely and accepted, within the designated limits. The area will be measured once, regardless of the number of applications required.

Basis of Payment: This work will be paid for at the Contract unit price per square yard for “Penetrating Sealer Protective Compound,” complete, which price shall include all equipment tools, labor and materials, incidental thereto, including the preparation of the concrete surfaces and proper disposal of debris.

Pay Item	Pay Unit
Penetrating Sealer Protective Compound	s.y.

ITEM #0904990A – METAL BRIDGE RAIL

Work under this item shall conform to the requirements of Section 9.04 including the following:

Article 9.04.01 - Description: is amended as follows:

The Metal Bridge Rail shall be furnished as shown on the construction drawings. Metal Bridge Rail shall consist of HSS and fittings, structural steel shapes, anchor bolts, hardware fasteners, terminal elements for connection to bridge parapets and fabricated in accordance with the dimensions and details given, and erected where shown on the plans.

Article 9.04.02 – Materials: is amended as follows:

The materials for this work shall be as specified on the construction drawings and as follows.

Preformed bearing pads shall be manufactured as a single sheet approximately 1/8 in. thick, in the required dimensions shown on the plans. Bearing pads shall be accepted based upon receipt of a Certificate of Compliance stating that the products comply with one of the following requirements, as applicable, including test results performed by an independent testing laboratory.

- a. M 251 pads – Plain or fabric-reinforced elastomeric pads conforming to AASHTO M 251 meeting the elastomer properties of 50 on the Shore A-durometer (minimum) material, adequate for 1000 psi design compression stress, and meeting Level I test requirements with no crack after the compressive load test.
- b. Random-oriented fiber pads consisting of a fabric and rubber body made with new unvulcanized rubber and unused fabric or synthetic fibers and vulcanized with a proportion of fiber content sufficient to maintain strength and stability. Rubber shall be polyisoprene (natural rubber) or polychloroprene (neoprene). The surface hardness shall be minimum 80 ± 5 Shore A-durometer. The ultimate breakdown limit of the pad under compressive loading shall be no less than 7000 psi without splits and without deformations exceeding 10 percent of thickness after removing the load.

Article 9.04.03 – Construction Methods: is supplemented as follows:

Before fabricating any portion of the bridge rail, the Contractor shall submit shop drawings to the Engineer for approval in accordance with Subarticle 1.05.02-3. These drawings shall include, but not be limited to, the following information: complete details and dimensions of the bridge rail, including post spacing, expansion joint locations, and material designations.

1. **Fabrication:** All steel, except for the anchor plates, shall be blast cleaned prior to fabrication. The blast cleaning shall conform to Steel Structures Painting Council Surface Preparation Specification “Near White Blast Cleaning” SSPC-SP10. In assembly and during welding, the component parts of built up members shall be held by sufficient clamps or by other adequate means to keep parts straight and in close contact.

Welding and fabrication of steel shall conform to the AASHTO Standard Specifications for Highway Bridges and the ANSI/AASHTO/AWS D1.5 Bridge Welding Code. If the members are tubular sections, the fabrication and welding shall conform to the ANSI/AWS D1.1 Structural Welding Code-Steel.

Prior to galvanizing, the fabricator shall ensure that all rail and rail components are smooth and without sharp protrusions that would present an injury hazard to pedestrians. Any drain holes necessary to ensure safe galvanizing shall be drilled by the fabricator.

2. **Galvanizing:** All bolts, screws, nuts, rods, and washers shall be galvanized in accordance with AASHTO M232 and the Supplemental Specifications. The posts, base plates, backing panel components, splice tubes, and structural tubing shall be galvanized after fabrication in accordance with AASHTO M111. Backing panels should not be galvanized fully assembled, since field adjustment may be required, i.e., by racking, to align panels with the rail connections. The galvanizing bath shall contain nickel (0.05% to 0.09% by mass). Galvanized members requiring shop assembly shall be welded and drilled prior to galvanizing.
3. **Bridge Rail Coating:** Prior to applying a coat over the galvanizing, the fabricator shall ensure that all rails are smooth and without sharp protrusions that would present an injury hazard to pedestrians. Also, all welds shall be cleaned thoroughly in accordance with good practice and shall have a suitable surface to accept the primer.

A two coat painting system shall be applied by the galvanizer in his/her own facility within twelve hours of galvanizing the railing components.

The prime coat material shall be a polyamide epoxy applied to a minimum dry film thickness of 3- mil and force cured as given below for the finish coat.

The finish coat material shall be a two component, catalyzed aliphatic urethane applied by airless spray to a minimum dry film thickness of 3-mil.

Unless otherwise specified, the color shall be black, which will match Color Number 17038 of the Federal Standard 595, "Colors Used in Government Procurement." The fabricator shall submit to the Engineer for approval paint chips of the intended color prior to any work being done under this heading.

All finish coat material shall be applied under conditions within the following tolerances:

- A. Air Temperature: 50° F min, 86° F max.
- B. Surface Temperature: 50° F min, 95° F max.
- C. Humidity: 65%

The finish coat shall be cured in a booth capable of maintaining 150° F for two to four hours.

4. **Touch Up and Repairs:** Should any damage occur to the galvanized coating during shipping or handling at the job site, the Contractor shall repair and touch up any damaged areas to the satisfaction of the Engineer and the following.

Touch up of galvanizing before finish coat is applied shall be accomplished by applying a galvanizing repair paint in accordance with the standard specifications. The dry film thickness of the applied repair paint shall not be less than 3-mil. Applications shall be in accordance with the manufacturer's instructions.

Field touch up procedures shall conform to the recommendations of the galvanizer. Touch up of the finish coat shall be by applying a coating of a two-part urethane, as supplied by the galvanizer, to achieve a dry film thickness of at least 3-mil. Prior to the application of the paint, remove all damaged coatings down to a solidly adhered coating and apply galvanizing repair paint as primer. Allow the primer to dry for at least four hours.

The Contractor shall also use the touch up paint material to paint the galvanized hardware used in the field erection of the railing that has not been finish coated previously.

Anchorage shall be installed in accordance with Subarticle 6.03.03-4b.

Rails shall be continuous over a minimum of four posts wherever possible, and in no case less than two. Welded splices of rails will not be allowed. Rail splices shall be located between posts, in accordance with the plans. Splice tubes shall have a sliding fit in the rail sections.

ITEM #0952051A - CONTROL AND REMOVAL OF INVASIVE VEGETATION

Description: This work shall include the development and implementation of an Invasive Vegetation Removal Plan (IVRP) to outline the materials, labor, and equipment the Contractor plans to use for the complete eradication and treatment of the invasive vegetation. The work shall also include the identification, excavation, removal, and off-Site disposal of unwanted vegetation as indicated on the plan sheets, permits or as directed by the Engineer.

All invasive vegetation listed on the following websites will be subject to eradication:

- Connecticut Invasive Plant Working Group (CIPWG) Invasive Plants Council (http://cipwg.uconn.edu/invasive_plant_list/)
- US Army Corps of Engineers (ACOE) New England District Compensatory Mitigation Guidance Appendix K (http://www.nae.usace.army.mil/portals/74/docs/regulatory/Mitigation/2016_New_England_Compensatory_Mitigation_Guidance.pdf)

All vegetation designated for removal shall be eradicated in its entirety in accordance with the IVRP submitted by the Contractor and approved by the Engineer. Certain situations may require the full and complete mechanical excavation of invasive vegetation including its entire root system. The use of herbicides will not be permitted between the dates of October 1 and May 31.

Materials: All herbicides shall be registered for the species being treated and shall be formulated as applicable for target-species foliar treatment, cut surface, or injection applications. Where work in or immediately adjacent to wetlands is necessary, the product label(s) for any chemical/adjutant formulation applied must indicate that the formulation is approved for aquatic environments.

Construction Methods:

1. IVRP: Prior to any ground disturbance within the Project limits, the Contractor shall submit an IVRP to the Engineer for review and approval. Within 30 days of receipt of the submittal, the Engineer will notify the Contractor whether the IVRP is approved, rejected or requires modifications by the Contractor. If any part of the plan is not approved, the Contractor shall promptly make any necessary changes and re-submit the entire plan for approval. The entire plan must be approved in writing prior to beginning any work on Site. In all cases, mechanical means shall be considered before the use of herbicides. If mechanical means is neither feasible nor recommended, an explanation must be provided in the IVRP. All removal methods shall prevent the spread of seeds – no mowing or “Brush Hog” equipment will be allowed. The approved methods must be capable of total removal and eradication of all identified invasive species in the designated areas throughout the Contract and the 1-Year Plant Establishment Period.

The IVRP shall include a schedule and outline with the following information:

- 1) The Contractor’s methods of determining invasive vegetation surveyed limits, including:
 - a. Stake out the limits prior to the initial treatment
 - b. Maintain a record of the staked limits throughout the life of the Contract
- 2) Identification of the type(s) of invasive species present within the field surveyed limits

- 3) A marked up plan sheet outlining the invasive species limits and identifying the types of invasive species present within those limits and total square yards of proposed removal
- 4) For each species present on-Site, the following shall be described:
 - a. Methods to eradicate specific invasive plant species for the life of the Contract (e.g. mechanical, herbicide, etc.) shall include any initial, intermediate and 1-Year Plant Establishment Period Treatment eradication methods for each plant species
 - b. Types and concentrations of any herbicides to be used, including any adjuvants, SDS sheets, types of tools or machinery to be used
 - c. Schedules showing dates and eradication methods for the initial, intermediate, and 1-Year Plant Establishment Period Treatments. This schedule must take into consideration stage construction, the time period required between herbicide application, and the physical removal of the target species wherever such methodology is employed
- 5) All invasive species are considered controlled materials and are to be taken off-Site to an approved disposal facility. For disposal methods:
 - a. Provide address of location, current permits / letters from the town authorizing such activity and a Site map (complete with regulated areas)
 - b. Wood chips from invasive species are not allowed to be stockpiled or reused on-Site
 - c. Wood chipping on-Site will be allowed if temporarily stored in a properly contained enclosure and removed at the end of the treatment cycle
 - d. Invasive plants shall not be buried on-Site
- 6) Proof of CT DEEP licensure for herbicide application
- 7) A description of safety equipment required
- 8) Procedures for handling chemical spills

Where certain species of invasive vegetation are present and identified on the plan sheets, permits, or as identified in the field by the Engineer, the removal via bulk mechanical excavation of such vegetation and the underlying soils may be required as directed. The approved method must be capable of the removal of all soil to a depth where invasive plant material and root system is no longer evident, or as directed by the Engineer.

Whether the Contractor's method of removal is by mechanical excavation or cutting and spraying of herbicides, invasive species must be removed separately from clearing and grubbing operations and disposed at an approved location as described in the Contractor's IVRP.

No equipment or vehicles other than that required to complete the work will be permitted in the areas designated for invasive vegetation removal. Any equipment used to process invasive vegetation, such as chippers and transport vehicles, must be cleaned prior to further use.

Any invasive species control and removal work performed throughout the duration of the Contract that causes damage or soil disturbance shall be repaired at the Contractor's expense within 7 days. It is the Contractor's responsibility to identify additional areas of concern for invasive vegetation within the limits of the Project, notify the Engineer, and to amend the IVRP.

The Contractor shall be responsible to identify invasive vegetation at all times of the year and to prepare a plan for its eradication without assistance.

All treatments, with the exception of an initial mechanical excavation of invasive species, will not be allowed outside of the optimal growing season between the dates of October 1 and May 31.

Herbicide applications will not be permitted during any rain event or during windy conditions. Broadcast or uncontrolled spray application will not be permitted and care must be taken to avoid contacting non-target native species. If any non-target native species to remain within the Project limits are inadvertently treated with herbicide and perish, the Contractor will be responsible to replace in-kind species at no cost to the State.

Remove all twining vines in treetops to the greatest extent possible without damaging the branches of the supporting desired vegetation. Cut and remove vines overtopping tree canopies to the extent practical. Climbing spikes will not be permitted for aerial work.

The Contractor shall also:

- 1) Maintain the labels for herbicides being used in his/her possession
- 2) Conduct all herbicide formulations and applications, including the addition of appropriate surfactants and other adjuvants, in strict conformance with the manufacturer's recommendation and per requirements of regulatory agencies
- 3) Maintain a written record of herbicide application, including the formulation, concentration, area treated, and date for each application. The records are to be provided by the commercial applicator and submitted to the Engineer following each treatment

Flush cut brush and trees shall not be more than 2 inches above the ground line. Prune out any branches on non-treatment plants that are damaged during removal of vegetation. All corrective pruning shall conform to the National Arborists Association Pruning Standards.

Wherever removal operations result in exposed soils, disturbed areas shall be vegetatively stabilized with the appropriate seed mix and protected with hay, cellulous fiber mulch, or erosion control matting.

Once the IVRP is approved, a field review shall be scheduled for the Contractor and Engineer to review the limits of invasive species removal (surveyed and flagged by the Contractor prior to the meeting), the specific species required to be removed, and the Contractor's submitted invasive species removal plan. At this time, the Engineer may identify additional invasive species or designate additional areas for removal that are not included with the Contractor's submitted IVRP.

If changes are required to the approved IVRP during the life of the Contract, these changes shall be documented by the Contractor and resubmitted to the Engineer for review and approval a minimum of 10 days prior to beginning of the additional work associated with the change. The Contractor shall provide a 10 day work notice to the Engineer prior to proceeding with each treatment.

2. Treatments: The treatment schedule below may be modified based on field conditions at the discretion of the Engineer. The Contractor shall provide a 10 day work notice to the Engineer prior to proceeding with each treatment. In all cases, each treatment must be reviewed once the work is performed, and accepted before payment is made for that treatment stage.

Initial Treatment: Shall commence at the beginning of the Contract time, prior to clearing and grubbing activities. Any invasive species found within a proposed cut slope shall be fully eradicated to the satisfaction of the Engineer prior to any earth work operations. After the completion of the initial treatment, the work must be reviewed and accepted by the Engineer prior to any earth excavation in that area. If herbicide is the initial treatment method, a minimum of 14 days is required prior to clearing and grubbing operations, so the herbicide application can take effect.

Intermediate Treatment(s): Shall be conducted during the optimal growing season between the dates of June 1 and September 30 for invasive species up to and including 10 days prior to plant installation or at the end of the Project if no landscaping plan is in the Contract. Optimal treatment times may be specific to the species being treated and this must be considered and documented when developing the Invasive Vegetation Removal Plan. Several treatments may be required to treat all species that are present.

1-Year Plant Establishment Period Treatment: Treatments as needed or as directed by the Engineer shall be conducted throughout the 1-Year Plant Establishment Period or when required under another Contract item.

Method of Measurement: This work will be measured for payment by the number of square yards of invasive vegetation identified, surveyed, treated and eradicated as required including any required re-treatment of any regrowth or new growth. No additional payment will be made for subsequent treatments. The area for removal will be surveyed and flagged prior to treatment and measured. After a review of the surveyed limits, the Engineer may designate additional areas for removal that are not shown on the plans. These additional areas will be measured for payment and included as part of the Contract work.

Where selective removal is required, the square yards of the drip line of the invasive vegetation will be measured for payment.

Basis of Payment: This work will be paid for at the Contract unit price per square yard for "Control and Removal of Invasive Vegetation." This payment shall include all labor, surveys, materials, tools, and equipment necessary for limits of the invasive area(s); maintenance of the limits throughout the Project; species identification; and cutting, excavation, treating, re-treating, removal, and off-Site disposal of designated invasive plant material. Off-Site disposal of residue shall include the loading, transport, dumping, and fees associated with legal off-site disposal.

- Upon approval of the required IVRP, the Contractor will receive a payment equal to 10% of the estimated Contract value

- Upon initial herbicide or mechanical removal treatment methods as it is described in the IVRP, the Contractor will receive a payment equal to 20% of all areas receiving treatment
- Upon successful completion of the initial treatment period, as determined during the review by the Engineer, the Contractor will receive a payment equal to 20%
- Upon successful completion of the intermediate treatment period as determined during the Site review by the Engineer, the Contractor will receive a payment equal to 20%
- Upon successful completion of the 1-Year Plant Establishment Period covering all treated areas on the Project (or the last treatment for those Projects which may not include a 1-Year Plant Establishment Period), the Contractor will receive final payment equal to the measured areas in place and treated, less any previous payments

Where bulk excavation is required for removal, this work shall be covered under the Contract Item “Earth Excavation” for all excavation in excess of 2 feet. All other vegetation not designated as invasive vegetation shall be removed in compliance with the Item “Clearing and Grubbing” in accordance with Section 2.01.

Vegetative stabilization of disturbed areas will be paid for under the respective Contract Items: “Turf Establishment,” “Wetland Grass Establishment,” or “Conservation Seeding for Slopes.”

Pay Item	Pay Unit
Control and Removal of Invasive Vegetation	s.y.

ITEM #0969060A - CONSTRUCTION FIELD OFFICE, SMALL

Description: Under the item included in the bid document, adequate weatherproof office quarters with related furnishings, materials, equipment and other services, shall be provided by the Contractor for the duration of the work, and if necessary, for a close-out period determined by the Engineer. The office, furnishings, materials, equipment, and services are for the exclusive use of CITY forces and others who may be engaged to augment CITY forces with relation to the Contract. The office quarters shall be located convenient to the work site and installed in accordance with Article 1.08.02. This office shall be separated from any office occupied by the Contractor. Ownership and liability of the office quarters shall remain with the Contractor.

Furnishings/Materials/Supplies/Equipment: All furnishings, materials, equipment and supplies shall be in like new condition for the purpose intended and require approval of the Engineer.

Office Requirements: The Contractor shall furnish the office quarters and equipment as described below:

Description \ Office Size	Small
Minimum Sq. Ft. of floor space with a minimum ceiling height of 7 ft.	400
Minimum number of exterior entrances.	2
Minimum number of parking spaces.	7

Office Layout: The office shall have a minimum square footage as indicated in the table above, and shall be partitioned as shown on the building floor plan as provided by the Engineer.

Tie-downs and Skirting: Modular offices shall be tied-down and fully skirted to ground level.

Lavatory Facilities: For field offices sizes Small and Medium the Contractor shall furnish a toilet facility at a location convenient to the field office for use by CITY personnel and such assistants as they may engage; and for field offices sizes Large and Extra Large the Contractor shall furnish two (2) separate lavatories with toilet (men and women), in separately enclosed rooms that are properly ventilated and comply with applicable sanitary codes. Each lavatory shall have hot and cold running water and flush-type toilets. For all facilities the Contractor shall supply lavatory and sanitary supplies as required.

Windows and Entrances: The windows shall be of a type that will open and close conveniently, shall be sufficient in number and size to provide adequate light and ventilation, and shall be fitted with locking devices, blinds and screens. The entrances shall be secure, screened, and fitted with a lock for which four keys shall be furnished. All keys to the construction field office shall be furnished to the CITY and will be kept in their possession while State personnel are using the office. Any access to the entrance ways shall meet applicable building codes, with appropriate handrails. Stairways shall be ADA/ABA compliant and have non-skid tread surfaces. An ADA/ABA compliant ramp with non-skid surface shall be provided with the Extra-Large field office.

Lighting: The Contractor shall equip the office interior with electric lighting that provides a minimum illumination level of 100 foot-candles at desk level height, and electric outlets for each desk and drafting table. The Contractor shall also provide exterior lighting that provides a minimum

illumination level of 2 foot-candles throughout the parking area and for a minimum distance of 10 ft. on each side of the field office.

Parking Facility: The Contractor shall provide a parking area, adjacent to the field office, of sufficient size to accommodate the number of vehicles indicated in the table above. If a paved parking area is not readily available, the Contractor shall construct a parking area and driveway consisting of a minimum of 6 inches of processed aggregate base graded to drain. The base material will be extended to the office entrance.

Field Office Security: Physical Barrier Devices - This shall consist of physical means to prevent entry, such as: 1) All windows shall be barred or security screens installed; 2) All field office doors shall be equipped with dead bolt locks and regular day operated door locks; and 3) Other devices as directed by the Engineer to suit existing conditions.

Electric Service: The field office shall be equipped with an electric service panel, wiring, outlets, etc., to serve the electrical requirements of the field office, including: lighting, general outlets, computer outlets, calculators etc., and meet the following minimum specifications:

- A. 120/240 volt, 1 phase, 3 wire
- B. Ampacity necessary to serve all equipment. Service shall be a minimum 100 amp dedicated to the construction field office.
- C. The electrical panel shall include a main circuit breaker and branch circuit breakers of the size and quantity required.
- D. Additional 120 volt, single phase, 20 amp, isolated ground dedicated power circuit with dual NEMA 5-20 receptacles will be installed at each desk and personal computer table (workstation) location.
- E. Additional 120 volt, single phase, 20 amp, isolated ground dedicated power circuit with dual NEMA 5-20 receptacles will be installed, for use by the Telephone Company.
- F. Additional 120-volt circuits and duplex outlets as required meeting National Electric Code requirements.
- G. One exterior (outside) wall mounted GFI receptacle, duplex, isolated ground, 120 volt, straight blade.
- H. After work is complete and prior to energizing, the City's electrical inspector, must be contacted.

Heating, Ventilation and Air Conditioning (HVAC): The field office shall be equipped with sufficient heating, air conditioning and ventilation equipment to maintain a temperature range of 68°-80° Fahrenheit within the field office.

Telephone Service: The Contractor shall provide telephone service with unlimited nation-wide calling plan. For a Small, Medium and Large field office this shall consist of the installation of two (2) telephone lines: one (1) line for phone/voice service and one (1) line dedicated for the facsimile machine. For an Extra-Large field office this shall consist of four (4) telephone lines: three (3) lines for phone/voice service and one (1) line dedicated for facsimile machine. The Contractor shall pay all charges.

Data Communications Facility Wiring: Contractor shall install a Category 6 568B patch panel in a central wiring location and Cat 6 cable from the patch panel to each PC station, Smart Board location, Multifunction Laser Printer/Copier/Scanner/Fax, terminating in a (Category 6 568B) wall or surface mount data jack. The central wiring location shall also house either the data circuit with appropriate power requirements or a category 5 cable run to the location of the installed data circuit. The central wiring location will be determined by the CTDOT OIS staff in coordination with the designated field office personnel as soon as the facility is in place.

For Small, Medium and Large field offices the Contractor shall run a CAT 6 LAN cable a minimum length of 25 feet for each CTDOT networked device (including but not limited to: smartboards and Multi-Function Laser Printer/Copier/Scanner/Fax) to LAN switch area leaving an additional 10 feet of cable length on each side with terminated RJ45 connectors. For an Extra-Large field office the Contractor shall run CAT 6 LAN cables from workstations, install patch panel in data circuit demark area and terminate runs with RJ45 jacks at each device location. Terminate runs to patch panel in LAN switch area. Each run / jack shall be clearly labeled with an identifying Jack Number.

The Contractor shall supply cables to connect the Wi-Fi printer to the Contractor supplied internet router and to workstations/devices as needed. These cables shall be separate from the LAN cables and data Jacks detailed above for the CTDOT network.

The number of networked devices anticipated shall be at least equal to the number of personal computer tables, Multi-Function Laser Printer/Copier/Scanner/Fax, and smartboards listed below.

The installation of a data communication circuit between the field office and the CTDOT OIS in Newington will be coordinated between the CTDOT District staff, CTDOT OIS staff and the local utility company once the Contractor supplies the field office phone numbers and anticipated installation date. The Contractor shall provide the field office telephone number(s) to the CTDOT Project Engineer within 10 calendar days after the signing of the Contract as required by Article 1.08.02. This is required to facilitate data line and computer installations.

Additional Equipment, Facilities and Services: The Contractor shall provide at the field Office at least the following to the satisfaction of the Engineer:

Furnishing Description	Office Size
	Small
	Quantity
Office desk (2.5 ft. x 5 ft.) with drawers, locks, and matching desk chair that have pneumatic seat height adjustment and dual wheel casters on the base.	1
Personal computer tables (4 ft. x 2.5 ft.).	2
Drafting type tables (3 ft. x 6 ft.) and supported by wall brackets and legs; and matching drafters stool that have pneumatic seat height adjustment, seat back and dual wheel casters on the base.	1

Office Chairs.	2
Fire resistant cabinet (legal size/4 drawer), locking.	1
Vertical plan racks for 2 sets of 2 ft. x 3 ft. plans for each rack.	1
Case of cardboard banker boxes (Min 10 boxes/case)	1
White Dry-Erase Board, 36" x 48" min. with markers and eraser.	1
Wastebaskets - 30 gal., including plastic waste bags.	1
Wastebaskets - 5 gal., including plastic waste bags.	1
Telephone.	1
Full size stapler 20 (sheet capacity, with staples)	1
Desktop tape dispensers (with Tape)	1
8 Outlet Power Strip with Surge Protection	3
Rain Gauge	1
Mini refrigerator - 3.2 c.f. min.	1
Hot and cold water dispensing unit. Disposable cups and bottled water shall be supplied by the Contractor for the duration of the project.	1
Microwave, 1.2 c.f. , 1000W min.	1
Electric pencil sharpeners.	1
Electronic office type printing calculators capable of addition, subtraction, multiplication and division with memory and a supply of printing paper.	1
Small Multi-Function Laser Printer/Copier/Scanner/Fax combination unit, network capable, as specified below under <u>Computer Related Hardware and Software</u> .	1
Field Office Wi-Fi Connection as specified below under <u>Computer Related Hardware and Software</u>	1
Wi-Fi Printer as specified below under <u>Computer Related Hardware and Software</u> .	1
Digital Camera as specified below under <u>Computer Related Hardware and Software</u> .	1
Infrared Thermometer, including annual third party certified calibration, case, and cleaning wipes.	1
Concrete Curing Box as specified below under Concrete Testing Equipment.	1
Concrete Air Meter and accessories as specified below under Concrete Testing Equipment as specified below. Contractor shall provide third party calibration on a quarterly basis.	1
Concrete Slump Cone and accessories as specified below under Concrete Testing Equipment.	1
First Aid Kit	1
Smart Phones as specified under <u>Computer Related Hardware and Software</u> .	1

The furnishings and equipment required herein shall remain the property of the Contractor. Any supplies required to maintain or operate the above listed equipment or furnishings shall be provided by the Contractor for the duration of the project.

Computer Related Hardware and Software: The CTDOT will supply by its own means the actual Personal Computers for the CTDOT representatives. The Contractor shall supply the Field Office Wi-Fi Connection, Wi-Fi Printer, Digital Camera(s), Flip Phones, Smart Phones, Multifunction Laser Printer/Copier/Scanner/Fax, Video Projectors, and Smart Board(s) as well as associated hardware and software, must meet the requirements of this specification as well as the latest minimum specifications posted, as of the project advertising date, at CTDOTs web site <https://portal.ct.gov/DOT/Office-of-Construction/Construction-Field-Office-Technology-Contractor-Requirements>

Within 10 calendar days after the signing of the Contract but before ordering/purchasing the Wi-Fi Printer (separate from the Multifunction Laser Printer/Copier/Scanner/Fax), Field Office Wi-Fi, Digital Camera(s), Flip Phones, Smart Phones, Multifunction Laser Printer/Copier/Scanner/Fax, Video Projector(s) and Smart Board(s) as well as associated hardware, the Contractor must submit a copy of their proposed order(s) with catalog cuts and specifications to the Administering CTDOT District for review and approval. The Wi-Fi Printer, Wi-Fi Router, Flip Phones, Smart Phones, digital cameras, Projector(s) and Smart Board(s) will be reviewed by CTDOT District personnel. The Multifunction Laser Printer/Copier/Scanner/Fax will be reviewed by the CTDOT OIS. The Contractor shall not purchase the hardware, software, or services until the Administering CTDOT District informs them that the proposed equipment, software, and services are approved. The Contractor will be solely responsible for the costs of any hardware, software, or services purchased without approval.

The Contractor and/or their internet service provider shall be responsible for the installation and setup of the field office Wi-Fi, Wi-Fi printer, and the configuration of the wireless router as directed by the CTDOT. Installation will be coordinated with CTDOT District and Project personnel.

After the approval of the hardware and software, the Contractor shall contact the designated representatives of the CTDOT administering District, a minimum of 2 working days in advance of the proposed delivery or installation of the Field Office Wi-Fi Connection, Wi-Fi Printer, Digital Camera(s), Flip Phones, Smart Phones, Multifunction Laser Printer/Copier/Scanner/Fax, Video Projectors and Smart Board(s), as well as associated hardware, software, supplies, and support documentation.

The Contractor shall provide all supplies, paper, maintenance, service and repairs (including labor and parts) for the Wi-Fi printers, copiers, field office Wi-Fi, fax machines and other equipment and facilities required by this specification for the duration of the Contract. All repairs must be performed with-in 48 hours. If the repairs require more than a 48 hours then an equal or better replacement must be provided.

Once the Contract has been completed, the hardware and software will remain the property of the Contractor.

First Aid Kit: The Contractor shall supply a first aid kit adequate for the number of personnel expected based on the size of the field office specified and shall keep the first aid kit stocked for the duration that the field office is in service.

Rain Gauge: The Contractor shall supply install and maintain a rain gauge for the duration of the project, meeting these minimum requirements. The rain gauge shall be installed on the top of a post such that the opening of the rain gauge is above the top of the post an adequate distance to avoid splashing of rain water from the top of the post into the rain gauge. The Location of the rain gauge and post shall be approved by the Engineer. The rain gauge shall be made of a durable material and have graduations of 0.1 inches or less with a minimum total column height of 5 inches. If the rain gauge is damaged the Contractor shall replace it prior to the next forecasted storm event at no additional cost.

Concrete Testing Equipment: If the Contract includes items that require compressive strength cylinders for concrete, in accordance with the Schedule of Minimum Testing Requirements for Sampling Materials for Test, the Contractor shall provide the following equipment.

- A) Concrete Cylinder Curing Box – meeting the requirements of Section 6.12 of the Standard Specifications.
- B) Air Meter – The air meter provided shall be in good working order and meet the requirements of AASHTO T 152.
- C) Slump Cone Mold – Slump cone, base plate, and tamping rod shall be provided in like-new condition and meet the requirements of AASHTO T119, Standard Test Method for Slump of Hydraulic-Cement Concrete.

All testing equipment will remain the property of the Contractor at the completion of the project.

Insurance Policy: The Contractor shall provide a separate insurance policy, with no deductible, in the minimum amount of five thousand dollars (\$5,000) in order to insure all State-owned data equipment and supplies used in the office against all losses. The Contractor shall be named insured on that policy, and the CTDOT shall be an additional named insured on the policy. These losses shall include, but not be limited to: theft, fire, and physical damage. The CTDOT will be responsible for all maintenance costs of CTDOT owned computer hardware. In the event of loss, the Contractor shall provide replacement equipment in accordance with current CTDOT equipment specifications, within seven days of notice of the loss. If the Contractor is unable to provide the required replacement equipment within seven days, the CTDOT may provide replacement equipment and deduct the cost of the equipment from monies due or which may become due the Contractor under the Contract or under any other contract. The Contractor's financial liability under this paragraph shall be limited to the amount of the insurance coverage required by this paragraph. If the cost of equipment replacement required by this paragraph should exceed the required amount of the insurance coverage, the CTDOT will reimburse the Contractor for replacement costs exceeding the amount of the required coverage.

Maintenance: During the occupancy by the CTDOT, the Contractor shall maintain all facilities and furnishings provided under the above requirements, and shall maintain and keep the office quarters clean through the use of weekly professional cleaning to include, but not limited to, washing & waxing floors, cleaning restrooms, removal of trash, etc. Exterior areas shall be mowed and clean of debris. A trash receptacle (dumpster) with weekly pickup (trash removal) shall be provided. Snow removal, sanding and salting of all parking, walkway, and entrance ways areas shall be accomplished during a storm if on a workday during work hours, immediately after a storm and prior to the start of a workday. If snow removal, salting and sanding are not completed by the specified time, the State will provide the service and all costs incurred will be deducted from the next payment estimate.

Method of Measurement: The furnishing and maintenance of the construction field office will be measured for payment by the number of calendar months that the office is in place and in operation, rounded up to the nearest month.

There will not be any price adjustment due to any change in the minimum computer related hardware and software requirements.

Basis of Payment: The furnishing and maintenance of the Construction Field Office will be paid for at the Contract unit price per month for “Construction Field Office, (Type),” which price shall include all material, equipment, labor, service contracts, licenses, software, repair or replacement of hardware and software, related supplies, utility services, parking area, external illumination, trash removal, snow and ice removal, and work incidental thereto, as well as any other costs to provide requirements of this specified this specification.

<u>Pay Item</u>	<u>Pay Unit</u>
Construction Field Office, (Type)	Month

ITEM #0971001A - MAINTENANCE AND PROTECTION OF TRAFFIC

Article 9.71.01 - Description is supplemented by the following:

The Contractor shall maintain and protect traffic as follows:

OLD FIELD ROAD

Old Field Road shall remain open to traffic during construction. The Contractor shall maintain and protect an alternating one-way traffic operation, on a paved travel path not less than 10-feet in width as shown on the plans.

Construction shall be staged to allow for the passage of traffic during all phases of construction as shown on the plans. The Contractor shall provide a smooth transition between all disturbed and undisturbed areas.

COMMERCIAL AND RESIDENTIAL DRIVEWAYS

The Contractor shall maintain access to and egress from all commercial and residential driveways throughout the project limits. The Contractor will be allowed to close said driveways to perform the required work during those periods when the businesses are closed unless permission is granted from the business owner to close the driveway during business hours. If a temporary closure of a residential driveway is necessary, the Contractor shall coordinate with the owner to determine the time period of the closure.

Article 9.71.03 - Construction Method is supplemented as follows:

SIGNING

The Contractor shall maintain all existing overhead and side-mounted signs throughout the project limits during the duration of the project. The Contractor shall temporarily relocate existing signs and sign supports as many times as deemed necessary and install temporary sign supports and foundations if necessary and as directed by the Engineer. The temporary relocation of any existing signs and supports and the furnishing, installation and removal of any temporary supports and foundations shall be paid for under the item "Maintenance and Protection of Traffic".

When all work is completed, the Contractor shall remove existing signs and install new signs as shown on the Signing and Pavement Marking Plans contained in the contract plans.

REQUIREMENTS FOR WINTER

The Contractor shall schedule a meeting with representatives of the Engineer and Representative of the Town to determine what interim traffic control measures the Contractor must accomplish for the winter to provide safety to the motorist and permit adequate snow removal procedures.

SIGNING PATTERNS

The Contractor shall erect and maintain all signing patterns in accordance with the traffic control plans contained herein. Proper distances between advance warning signs and proper taper lengths are mandatory.

ATTACHMENT "A"

CONSTRUCTION TRAFFIC CONTROL PLANS

REQUIRED SIGNS

NOTES

PLAN 13 (2 SHEETS)

PLAN 14

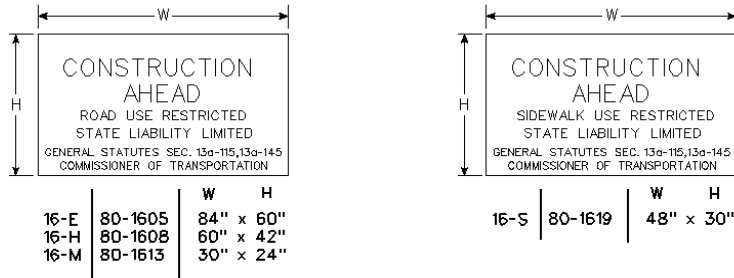
PLAN 15

PLAN 16

PLAN 17

PLAN 18

SERIES 16 SIGNS



THE 16-S SIGN SHALL BE USED ON ALL PROJECTS THAT REQUIRE SIDEWALK RECONSTRUCTION OR RESTRICT PEDESTRIAN TRAVEL ON AN EXISTING SIDEWALK.

SERIES 16 SIGNS SHALL BE INSTALLED IN ADVANCE OF THE TRAFFIC CONTROL PATTERNS TO ALLOW MOTORISTS THE OPPORTUNITY TO AVOID A WORK ZONE. SERIES 16 SIGNS SHALL BE INSTALLED ON ANY MAJOR INTERSECTING ROADWAYS THAT APPROACH THE WORK ZONE. ON LIMITED- ACCESS HIGHWAYS, THESE SIGNS SHALL BE LOCATED IN ADVANCE OF THE NEAREST UPSTREAM EXIT RAMP AND ON ANY ENTRANCE RAMP PRIOR TO OR WITHIN THE WORK ZONE LIMITS.

THE LOCATION OF SERIES 16 SIGNS CAN BE FOUND ELSEWHERE IN THE PLANS OR INSTALLED AS DIRECTED BY THE ENGINEER.

SIGNS 16-E AND 16-H SHALL BE POST MOUNTED.

SIGN 16-E SHALL BE USED ON ALL EXPRESSWAYS.

SIGN 16-H SHALL BE USED ON ALL RAMP, OTHER STATE ROADWAYS, AND MAJOR TOWN/CITY ROADWAYS.

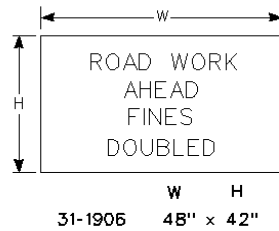
SIGN 16-M SHALL BE USED ON OTHER TOWN ROADWAYS.

REGULATORY SIGN "ROAD WORK AHEAD, FINES DOUBLED"

THE REGULATORY SIGN "ROAD WORK AHEAD, FINES DOUBLED" SHALL BE INSTALLED FOR ALL WORK ZONES THAT OCCUR ON ANY STATE HIGHWAY IN CONNECTICUT WHEN THERE ARE WORKERS ON THE HIGHWAY OR WHEN THERE IS OTHER THAN EXISTING TRAFFIC OPERATIONS.

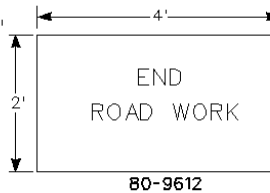
THE "ROAD WORK AHEAD, FINES DOUBLED" REGULATORY SIGNS SHALL NOT BE INSTALLED ON TOWN ROADS.

THE "ROAD WORK AHEAD FINES DOUBLED" REGULATORY SIGN SHALL BE PLACED AFTER THE SERIES 16 SIGN AND IN ADVANCE OF THE "ROAD WORK AHEAD" SIGN.



"END ROAD WORK" SIGN

THE LAST SIGN IN THE PATTERN MUST BE THE "END ROAD WORK" SIGN.



REV'D 1-02



CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING &
HIGHWAY OPERATIONS
DIVISION OF TRAFFIC ENGINEERING

CONSTRUCTION
TRAFFIC CONTROL PLAN
REQUIRED SIGNS

APPROVED J. Carey DATE 1-02
PRINCIPAL ENGINEER

NOTES FOR TRAFFIC CONTROL PLANS

1. IF A TRAFFIC STOPPAGE OCCURS IN ADVANCE OF SIGN (A), THEN AN ADDITIONAL SIGN (A) SHALL BE INSTALLED IN ADVANCE OF THE STOPPAGE.
2. SIGNS (AA), (A) AND (D) SHOULD BE OMITTED WHEN THESE SIGNS HAVE ALREADY BEEN INSTALLED TO DESIGNATE A LARGER WORK ZONE THAN THE WORK ZONE THAT IS ENCOMPASSED ON THIS PLAN.
3. SEE TABLE #1 FOR ADJUSTMENT OF TAPERS IF NECESSARY.
4. A CHANGEABLE MESSAGE SIGN MAY BE UTILIZED ONE HALF TO ONE MILE IN ADVANCE OF THE LANE CLOSURE TAPER.
5. IF THIS PLAN REMAINS IN CONTINUOUS OPERATION FOR MORE THAN 72 HOURS, THEN TRAFFIC DRUMS SHALL BE USED IN PLACE OF TRAFFIC CONES.
6. ANY LEGAL SPEED LIMIT SIGNS WITHIN THE LIMITS OF A ROADWAY / LANE CLOSURE AREA WILL BE COVERED WITH AN OPAQUE MATERIAL WHILE THE CLOSURE IS IN EFFECT AND UNCOVERED WHEN THE ROADWAY / LANE CLOSURE IS REOPENED TO ALL LANES OF TRAFFIC.
7. IF THIS PLAN REMAINS IN CONTINUOUS OPERATION FOR MORE THAN 36 HOURS, THEN THE EXISTING CONFLICTING PAVEMENT MARKINGS SHALL BE ERADICATED OR COVERED AND TEMPORARY PAVEMENT MARKINGS THAT DEPICT THE PROPER TRAVEL PATHS SHALL BE INSTALLED.
8. DISTANCES BETWEEN SIGNS IN THE ADVANCE WARNING AREA MAY BE REDUCED TO 200' ON LOW SPEED URBAN ROADS (SPEED LIMIT < 40 MPH).
9. FOR LANE CLOSURES ONE (1) MILE OR LONGER, A "REDUCE SPEED TO 45 MPH" SIGN SHALL BE PLACED AT THE ONE MILE POINT AND AT EACH MILE THEREAFTER.
10. IF THIS PLAN IS TO REMAIN IN OPERATION DURING THE HOURS OF DARKNESS, INSTALL BARRICADE WARNING LIGHTS - HIGH INTENSITY ON ALL POST-MOUNTED DIAMOND SIGNS IN THE ADVANCE WARNING AREA.
11. A CHANGEABLE MESSAGE SIGN SHALL BE INSTALLED ONE HALF TO ONE MILE IN ADVANCE OF THE LANE CLOSURE TAPER.

REV'D 1-02



CONNECTICUT
DEPARTMENT OF TRANSPORTATION
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HIGHWAY OPERATIONS
DIVISION OF TRAFFIC ENGINEERING

CONSTRUCTION
TRAFFIC CONTROL PLAN
NOTES

NOTES.DGN

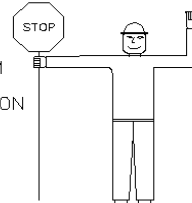
WORK IN TRAVEL LANE AND SHOULDER TWO LANE HIGHWAY ALTERNATING ONE-WAY TRAFFIC OPERATIONS

HAND SIGNAL METHODS TO BE USED BY UNIFORMED FLAGGERS

THE FOLLOWING METHODS FROM SECTION 6E.04 FLAGGER PROCEDURES IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" SHALL BE USED BY UNIFORMED FLAGGERS WHEN DIRECTING TRAFFIC THROUGH A WORK AREA. THE STOP/SLOW SIGN PADDLE (SIGN NO. 80-9950) SHOWN ON THE TYPICAL DETAIL SHEET ENTITLED "SIGNS FOR CONSTRUCTION AND PERMIT OPERATIONS" SHALL BE USED.

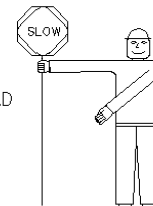
A. TO STOP TRAFFIC

TO STOP ROAD USERS, THE FLAGGER SHALL FACE ROAD USERS AND AIM THE STOP PADDLE FACE TOWARD ROAD USERS IN A STATIONARY POSITION WITH THE ARM EXTENDED HORIZONTALLY AWAY FROM THE BODY. THE FREE ARM SHALL BE HELD WITH THE PALM OF THE HAND ABOVE SHOULDER LEVEL TOWARD APPROACHING TRAFFIC.



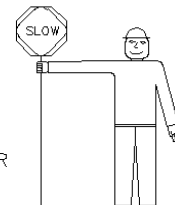
B. TO DIRECT TRAFFIC TO PROCEED

TO DIRECT STOPPED ROAD USERS TO PROCEED, THE FLAGGER SHALL FACE ROAD USERS WITH THE SLOW PADDLE FACE AIMED TOWARD ROAD USERS IN A STATIONARY POSITION WITH THE ARM EXTENDED HORIZONTALLY AWAY FROM THE BODY. THE FLAGGER SHALL MOTION WITH THE FREE HAND FOR ROAD USERS TO PROCEED.



C. TO ALERT OR SLOW TRAFFIC

TO ALERT OR SLOW TRAFFIC, THE FLAGGER SHALL FACE ROAD USERS WITH THE SLOW PADDLE FACE AIMED TOWARD ROAD USERS IN A STATIONARY POSITION WITH THE ARM EXTENDED HORIZONTALLY AWAY FROM THE BODY. TO FURTHER ALERT OR SLOW TRAFFIC, THE FLAGGER HOLDING THE SLOW PADDLE FACE TOWARD ROAD USERS MAY MOTION UP AND DOWN WITH THE FREE HAND, PALM DOWN.



SEE NOTES 1, 2, 5, 7, 8 & 10

REV'D 1-02



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DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING &
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DIVISION OF TRAFFIC ENGINEERING

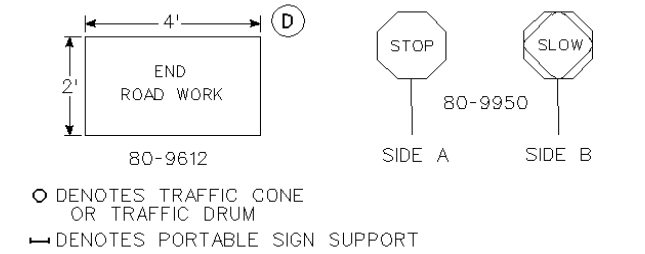
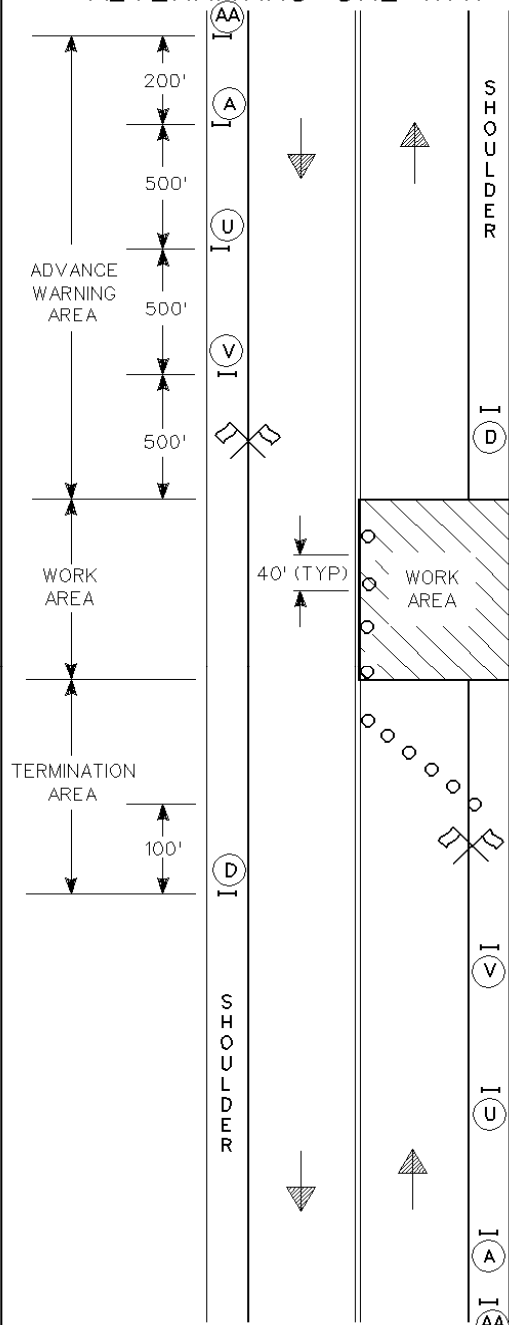
CONSTRUCTION
TRAFFIC CONTROL PLAN
PLAN 13

SHEET 2 OF 2 SCALE NONE

APPROVED J. Carey DATE 1-02
PRINCIPAL ENGINEER

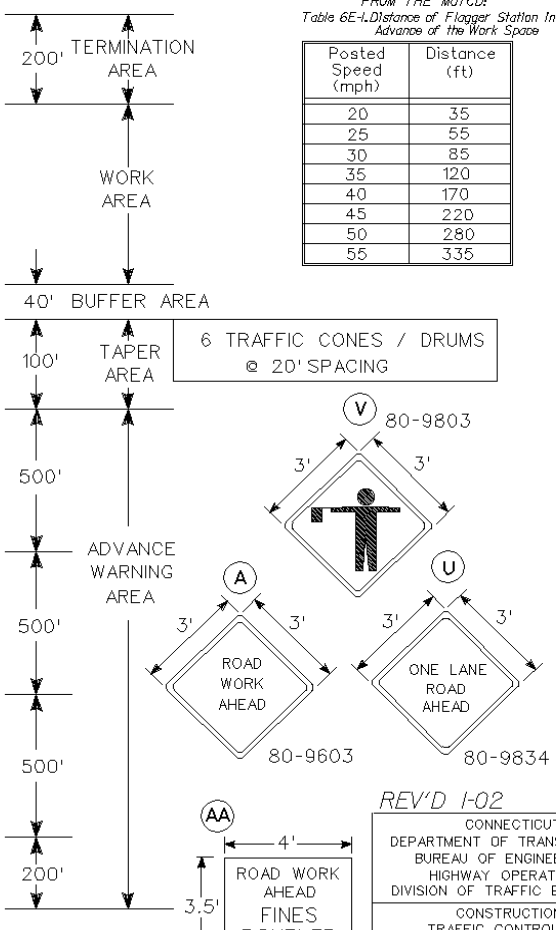
WORK IN TRAVEL LANE AND SHOULDER TWO LANE HIGHWAY ALTERNATING ONE-WAY TRAFFIC OPERATIONS

SIGN FACE
98 SQ. FT (MIN)



FROM THE MUTCD:
Table 6E-1. Distance of Flagler Station In Advance of the Work Space

Posted Speed (mph)	Distance (ft)
20	35
25	55
30	85
35	120
40	170
45	220
50	280
55	335



SEE NOTES 1, 2, 5, 7, 8 & 10

REV'D 1-02

CONNECTICUT
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING &
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DIVISION OF TRAFFIC ENGINEERING

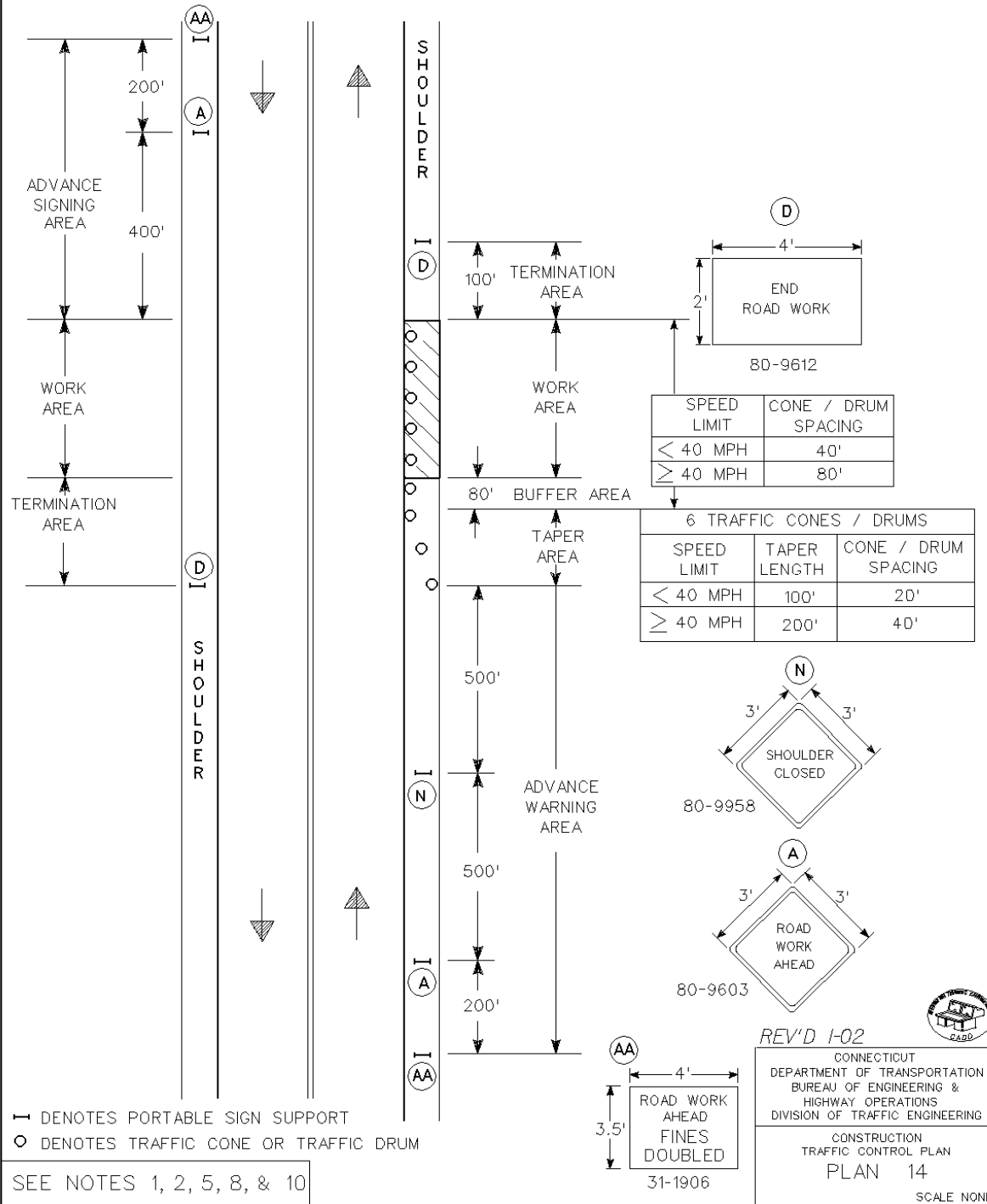
CONSTRUCTION
TRAFFIC CONTROL PLAN
PLAN 13

SHEET 1 OF 2 SCALE NONE

APPROVED J. Carey DATE 1-02
PRINCIPAL ENGINEER

WORK IN SHOULDER - TWO LANE HIGHWAY

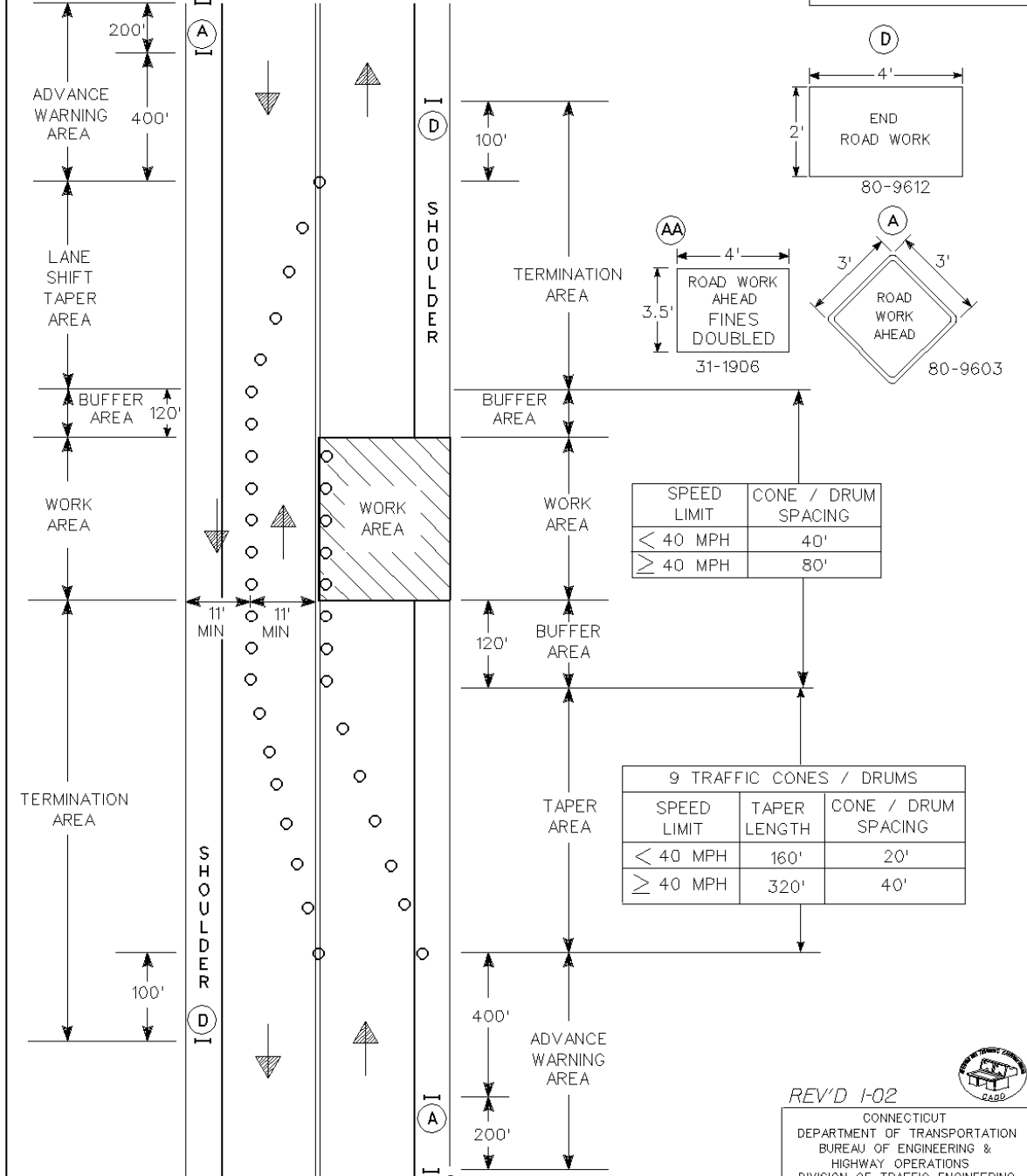
SIGN FACE
71 SQ. FT (MIN)



APPROVED J. Carey DATE 1-02
 PRINCIPAL ENGINEER

WORK IN TRAVEL LANE AND SHOULDER TWO LANE HIGHWAY

SIGN FACE
62 SQ. FT (MIN)



┌ DENOTES PORTABLE SIGN SUPPORT
○ DENOTES TRAFFIC CONE OR TRAFFIC DRUM

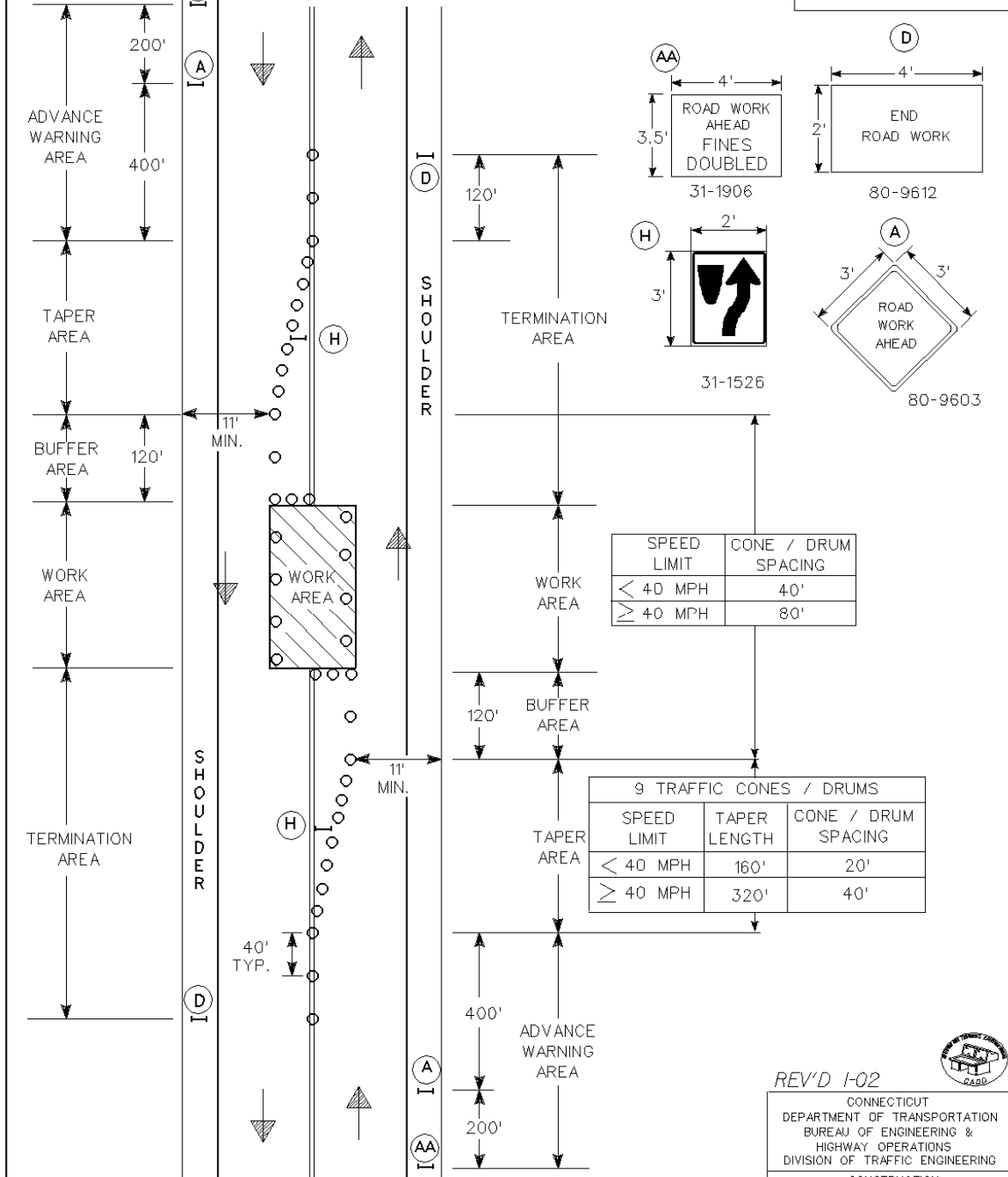
SEE NOTES 1, 2, 5, 7, 8 & 10

REV'D 1-02
CONNECTICUT
DEPARTMENT OF TRANSPORTATION
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HIGHWAY OPERATIONS
DIVISION OF TRAFFIC ENGINEERING
CONSTRUCTION
TRAFFIC CONTROL PLAN
PLAN 15
SCALE NONE

APPROVED J. Carey DATE 1-02
PRINCIPAL ENGINEER

WORK IN MIDDLE OF ROADWAY TWO LANE HIGHWAY

SIGN FACE
74 SQ. FT (MIN)



SPEED LIMIT	CONE / DRUM SPACING
< 40 MPH	40'
≥ 40 MPH	80'

9 TRAFFIC CONES / DRUMS		
SPEED LIMIT	TAPER LENGTH	CONE / DRUM SPACING
< 40 MPH	160'	20'
≥ 40 MPH	320'	40'

○ DENOTES TRAFFIC CONE OR TRAFFIC DRUM
 I DENOTES PORTABLE SIGN SUPPORT
 SEE NOTES 1, 2, 5, 7, 8 & 10

REV'D 1-02

CONNECTICUT
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 BUREAU OF ENGINEERING &
 HIGHWAY OPERATIONS
 DIVISION OF TRAFFIC ENGINEERING

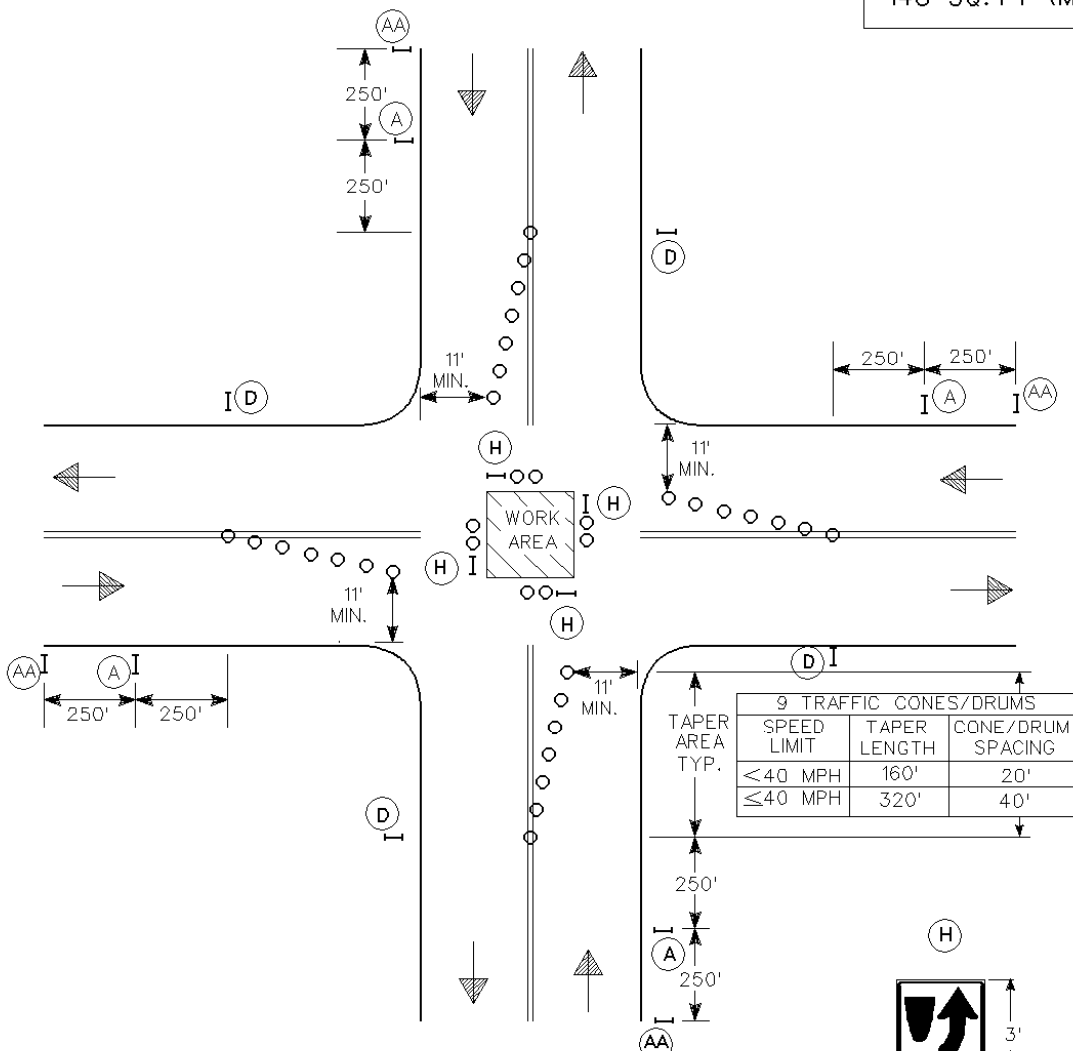
CONSTRUCTION
 TRAFFIC CONTROL PLAN
 PLAN 16

SCALE NONE

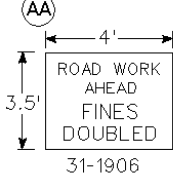
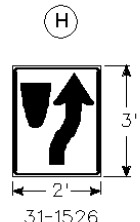
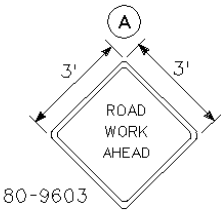
APPROVED J. Carey DATE 1-02
 PRINCIPAL ENGINEER

WORK IN MIDDLE OF ROADWAY AT INTERSECTION

SIGN FACE
148 SQ. FT (MIN)



9 TRAFFIC CONES/DRUMS		
SPEED LIMIT	TAPER LENGTH	CONE/DRUM SPACING
<40 MPH	160'	20'
≤40 MPH	320'	40'



○ DENOTES TRAFFIC CONE OR TRAFFIC DRUM
 ┌ DENOTES PORTABLE SIGN SUPPORT

SEE NOTES 1, 2, 5, 7 & 10

REV'D 1-02

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 BUREAU OF ENGINEERING &
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 DIVISION OF TRAFFIC ENGINEERING

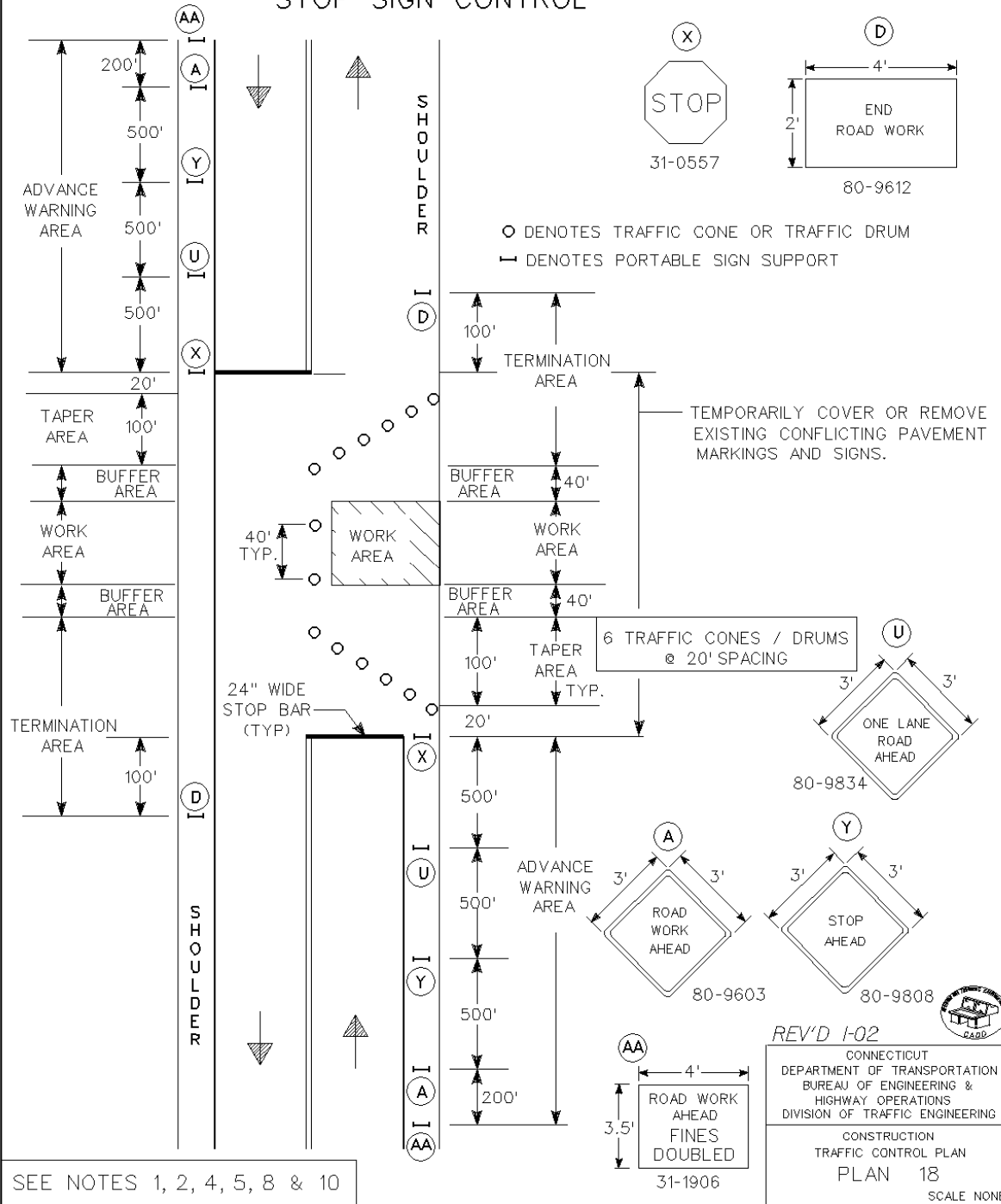
CONSTRUCTION
 TRAFFIC CONTROL PLAN
 PLAN 17

SCALE NONE

APPROVED J. Carey DATE 1-02
 PRINCIPAL ENGINEER

WORK IN TRAVEL LANE AND SHOULDER
TWO LANE HIGHWAY
ALTERNATING ONE-WAY TRAFFIC OPERATION
STOP SIGN CONTROL

SIGN FACE
124.6 SQ. FT (MIN)



SEE NOTES 1, 2, 4, 5, 8 & 10

REV'D 1-02
CONNECTICUT
DEPARTMENT OF TRANSPORTATION
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DIVISION OF TRAFFIC ENGINEERING
CONSTRUCTION
TRAFFIC CONTROL PLAN
PLAN 18
SCALE NONE

APPROVED J. Carey DATE 1-02
PRINCIPAL ENGINEER

END OF SECTION

ITEM #974001A - REMOVAL OF EXISTING MASONRY

Work under this item shall conform to the requirements of Section 9.74 of the Standard Specifications amended as follows:

Article 9.74.02 - Construction Methods: *Add the following:*

All work shall proceed to the satisfaction of the Engineer. The Contractor shall prevent debris, tools, and/or other materials from entering into or dropping into the waterway adjacent to the structure. All debris shall be promptly cleaned up and removed from the site.

The removal shall not result in damage to adjoining property or river area. If damage does occur, it shall be repaired by the Contractor to the satisfaction of the Engineer at no additional expense to the State.

When removing the concrete and reinforcing steel, the Contractor shall take necessary precautions to prevent debris from dropping to areas below the structure in to the river.

All material not designated for definite use shall be legally disposed of, off the site by the Contractor.

All debris shall be legally disposed of, off the site by the Contractor.

Article 9.74.04 – Basis of Payment: *Add the following:*

Costs associated with excavation that is incidental to the removal of existing masonry shall also be included under this item.

ITEM # 1204210A - FURNISH AND INSTALL PROJECT SIGN

Description:

This item shall include furnishing materials for and erecting a project construction identification sign of the size indicated, and in the location as determined by the Engineer. The sign is to be supported on posts or framing of preservative treated wood or steel, and the Contractor will be required to maintain sign and support throughout the duration of the project and remove sign upon project completion as directed by the engineer.

Referenced Items:

None

Required Submittals:

Shop Drawings: Submit two (2) copies of detailed shop drawings showing dimensioning and layout of sign, lettering sizes and font styles, logos & supports, as depicted in the attached detail, to be reviewed and approved by the Engineer.

Materials:

SIGN PANEL: Signs should be made from suitable materials to perform effectively for a minimum of 3 years. Example of allowable materials include ¾" MDO-EXT-APA Plywood or 0.125-gauge sheet aluminum. The following types of materials shall not be used: mesh, non-rigid, roll-up, corrugated or waffle board types substrates, foam core and composite aluminum sign substrates.

Suitable attachments shall be provided so that the signs can be firmly attached to the sign supports without causing damage to the signs.

Signs may be painted or use non-reflective plastic sheeting. Paint shall be extremely durable, high quality, semi-gloss enamel resistant to air, sun and water. Non-reflective plastic sheeting shall be permanently adhered to the backing. The material shall withstand 3 years' vertical, south-facing exterior exposure.

COLORS: All letters and symbols shall be blue code #0000FF, rgb (0, 0, 255), pantone 294, or approved equal. Background shall be white code #FFFFFF, rgb (255, 255, 255), or approved equal. If plywood is used for the sign panel, the back of the panel shall be painted matte black.

TYPEFACE: Helvetica Medium

SIGN SUPPORT: Sign panels shall be attached to vertical sign support posts. All sign supports shall have breakaway features that meet AASHTO requirements contained in the current "Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals". The breakaway features shall be structurally adequate to carry the sign panel at 60-mph wind loading. Installation shall be in accordance with the manufacturer's recommendations. A minimum 2-ft embedment depth below the ground line is required.

Construction Methods:

Provide 7'4" x 4'-0" project sign of 3/4" thick exterior grade, pressure treated plywood bound, with a 4" x 4" pressure treated wood frame. Sign shall be painted by a professional sign painter as shown in the drawings.

See attached pages for content of sign.

1. Installation Schedule

The sign shall be installed immediately upon notification from the Engineer. The contractor shall be required to confirm location and direction of sign placement with the engineer in writing.

2. Maintenance

Provide continuous maintenance on an as-needed basis as determined by the Engineer. Maintenance is to include re-erection of a new sign should the existing sign become severely damaged due to any negligence by the contractor or his agents.

3. Removal Schedule

Immediately upon notification from the Engineer.

4. Location:

The signs SHALL be installed parallel to the travel way, so they are NOT easily viewable by drivers, as the signs are not MUTCD compliant and not intended to be roadway signs.

The lateral offset from the edge of road to the face of sign should be 6-12 feet. 12 feet is preferred where space is available for installation. When installed on a trail, the lateral offset should be 2 feet.

The bottom of the sign should be mounted 7 feet above the edge of road.

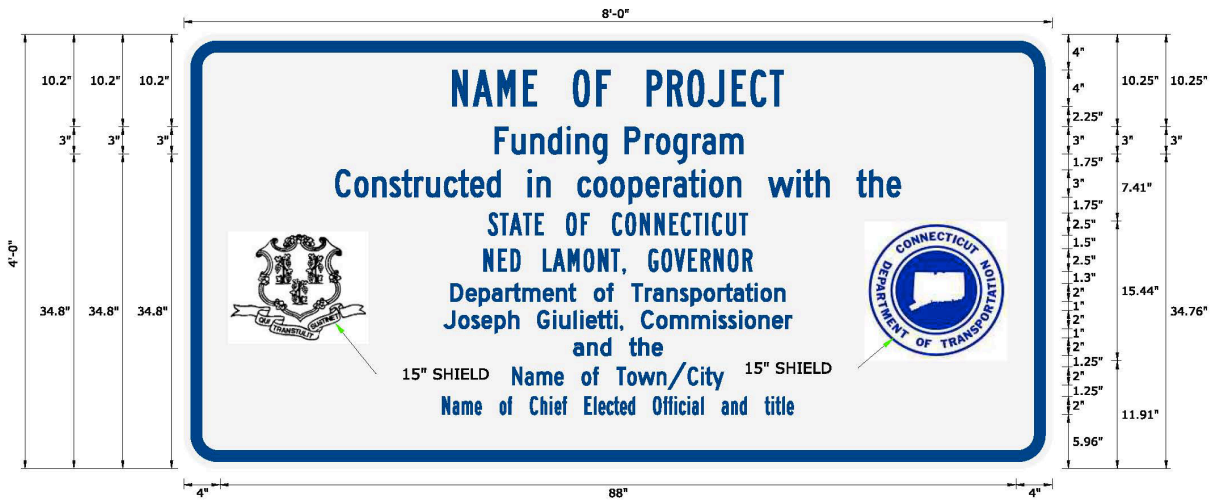
Method of Measurement:

This work will be measured for payment by the number of each “Furnish and Install Project Sign” erected, and accepted by the Engineer.

Basis of Payment:

This work will be paid for at the contract unit price per each “FURNISH AND INSTALL PROJECT SIGN” complete in place, and accepted by the Engineer. Said price is to include all materials, work, maintenance, equipment, labor, and incidental expense thereto.

<u>Pay Item</u>	<u>Pay Unit</u>
Furnish and Install Project Sign	ea.



SIGN PANEL: 3/4" MDO-EXT-APA PLYWOOD SUPPORTED WITH (2) 4X4 TREATED WOOD COLUMNS AND SECURED 4' INTO GRADE. TOP OF SIGN AT 8'-0" ABOVE GRADE.

COLORS: ALL LETTERS AND SYMBOLS ARE TO BE ROYAL BLUE. THE BACKGROUND WILL BE WHITE ENAMEL. BACK OF PLYWOOD AND SUPPORT STRUCTURE SHALL BE PAINTED MATTE BLACK.

TYPEFACE: HELVETICA MEDIUM

LOCATION: SIGN MUST BE LOCATED TO BE CLEARLY VISIBLE TO THE PUBLIC.

TIMING: INSTALL AT THE START OF CONSTRUCTION AND REMOVE AT CONSTRUCTION COMPLETION.

STATE SEAL & DOT LOGO: TO BE PROVIDED

ITEM #1700005A – TESTING

Description

At the discretion of the Engineer, periodic on-site tests may be ordered to satisfy the quality of the work or materials used on the Project. Testing under this item only applies to those on-site tests ordered by the Engineer; testing required by other specifications or to verify conformance with specification requirements shall not be paid for. Testing ordered by the Engineer under this item shall be performed by an independent third-party testing company.

Construction Methods

Compaction tests will be required for items such as trench backfill, subgrade, subbase, processed aggregate base, etc. to determine if compacted layers meet the specified requirements. The testing will be performed on each item as soon as practical. Should the material being tested fail the requirements as specified, the Contractor shall remove, replace and re-compact all soil material placed to that time. The material shall then be re-tested for compaction. When testing finds acceptable compaction and material and methods remain the same, additional compaction tests may not be required. When material or methods vary from those which achieved acceptable compaction, the Engineer will require that additional tests be performed.

Any deviation from the methods or compacting required in the Specifications will not be used unless approved by the Engineer in writing.

The Town shall pay for the first compaction test on each item. All re-testing required due to failure to achieve the specified density shall be paid for by the Contractor and shall be included in the general cost of the Contract.

All poured-in-place concrete will require testing. Tests will include but not be limited to air content, slump, 7-day & 28-day compression tests, etc.

Bituminous concrete pavements will be tested in accordance with Section 4.06 Bituminous Concrete of the Standard Specifications.

Basis of Payment

The sum of money for this item shown on the Estimate and in the itemized proposal as “Estimated Cost” for this work will be considered the bid price even though payment will be made as described below. The estimated cost figure is not to be altered in any manner by the bidder. Should the bidder alter the amount shown, the altered figures will be disregarded and the original price will be used in determining the total amount for the Contract.

The Town will pay the Contractor its actual costs for “Testing” plus an additional 5% as reimbursement for the Contractor’s administrative expense in connection with the services provided. The invoice must include a breakdown of date of service, actual hours of work, actual rate applied and test actually performed.

No payment on such an invoice will be made until and unless the Engineer has reviewed the invoice and approved the payment. The rate charged by the Testing Company shall not be greater than the rate that the normally charge others for similar services.

No payment will be made for Testing Services not authorized or requested by the Engineer, but ordered by the Contractor for his own convenience.

APPENDIX A
Wage Rates

APPENDIX B

Permits

