FOR THE
WALKER POND DREDGING PROGRAM
STURBRIDGE, MASSACHUSETTS
JUNE 1990

A PROGRAM FUNDED AND ADMINISTERED BY THE

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER POLLUTION CONTROL
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DIVISION OF WATERWAYS
DIVISION OF FORESTS AND PARKS

BOARD OF SELECTMEN
TOWN OF STURBRIDGE

AND

WALKER POND ASSOCIATION

PREPARED BY

Baystate Environmental Consultants, Inc.
295 North Main Street
East Longmeadow, Massachusetts
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A. ADVERTISEMENT FOR BID
Sealed Proposals to construct a containment basin, hydraulically dredge Walker Pond and restore basin area will be received by the Town Administrator, Selectmen's Office, Town Hall, Sturbridge, Massachusetts, up to __________ at 2:00 p.m. at which time they will be publicly opened and read.

General Bids shall be accompanied by a Bid Deposit in an amount which is not less than Five Percent (5%) of the Bid amount in the form of a Bid Bond, or a Certified Check or a Treasurer's or Cashier's Check issued by a responsible Bank or Trust Company having office in the Commonwealth of Massachusetts. Checks and Bid Bonds shall be made payable to the Town of Sturbridge, Massachusetts.

Attention is directed to the Instructions to Bidders of the specifications. The successful general bidder will be required to furnish a performance bond and also a labor and materials or payment bond as set forth in the specifications in the amount of 100 percent of the contract sum.

Attention is called to the fact that no less than the minimum wage rates set forth in a schedule contained in the specifications must be paid on this project. Commonwealth of Massachusetts Wage Rates are contained in Section L. Attention is called to the requirements relating to workmen's compensation and condition of employment.

A non-mandatory pre-bid conference will be held on __________ at 10:00 a.m. at the Administration Building, Wells State Park, Sturbridge, Massachusetts. All Bidders are invited to attend.

Contract documents will be on file at the office of BEC, Inc., 296 North Main Street, East Longmeadow, Massachusetts. Copies of the documents may be obtained by depositing a Certified Check or a Treasurer's or Cashier's Check issued by a responsible Bank or Trust Company payable to the Town of Sturbridge in the amount of $50.00 with BEC, Inc., for each set of documents so obtained. The amount of the deposit will be refunded to each person who returns all documents in good condition within 30 days after opening of bids.

Contract documents will be mailed upon request at an additional $20.00 per set prepaid mailing and handling charge (non-refundable check payable to BEC, Inc.).
The contract documents may also be seen at the following location:

Town of Sturbridge
Selectmen’s Office
Town Hall
Sturbridge, MA 01060

The Town of Sturbridge reserves the right to reject any or all bids of the General Bidders if it be in its interest to do so.

TOWN OF STURBRIDGE
TOWN HALL
STURBRIDGE, MA 01566
B. INFORMATION FOR BIDDERS

1. Receipt of Bids
2. Bid Form
3. Modification or Withdrawal of Bids
4. Examination of Contract Documents and Site
5. Performance Bond and Payment Bond
6. Power of Attorney
7. Award of Contract
8. Execution of Agreement
9. Notice to Proceed
10. Estimated Quantities
11. Available Funds
12. State Wage Rates
13. State Taxes
14. Qualification of Bidders
15. Conditional or Qualified Bids
16. Massachusetts Bidding Laws
17. Laws and Regulations
18. Equal Employment and Affirmative Action
19. Limitations of Data Presented
20. Addenda and Interpretations
21. Safety and Health Regulations
22. Access to Work
23. Engineer
24. Time for Completion of Work
INFORMATION FOR BIDDERS

1. RECEIPT OF BIDS

1-1. Bids will be received by the Town of Sturbridge (hereinafter called the "Owner") at the time and place given in the Advertisement for Bids.

1-2. Each bid shall be submitted in a sealed envelope, addressed to the Town of Sturbridge. Each sealed envelope containing a bid must be plainly marked on the outside as Bid Contract, Walker Pond Dredging Program, Town of Sturbridge and the envelope should bear on the outside the name of the bidder and his address. If forwarded by mail, the sealed envelope containing the bid shall be enclosed in another envelope.

1-3. All bidders are requested to attend a non-mandatory pre-bid conference at the time and place given in the Advertisement for Bids. At the conference the project will be discussed in some detail and most of the project site will be toured. The contract, specification, drawings and any other aspects of this project will be explained in response to questions by those attending. For interpretations of questions requiring legal, administrative, or engineering decisions, prospective bidders shall comply with Paragraph 16, Massachusetts Bidding Laws.

2. BID FORM

2-1. All bids shall be made on the Bid Form included in the specification, be completely filled out in ink or by typewriter, and be accompanied by a bid bond, cash, or certified check, or a treasurer’s or cashier’s check issued by a responsible bank or trust company, payable to the Owner, in the amount of five percent (5%) of the total bid price.

2-2. If unit prices are required on the Bid Form, discrepancies between unit prices and their respective total amounts will be resolved in favor of the unit prices. Discrepancies between words and figures will be resolved in favor of words. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

2-3. A bid which includes for any item a Bid Price that is abnormally low or high may be rejected as unbalanced.

2-4. Bids by corporations shall be executed in the corporate name by the president or a vice-president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal shall be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown below the signature.
2-5. Bids by partnerships shall be executed in the partnership name and signed by a partner, whose title shall appear under the signature. The official address of the partnership shall be shown below the signature.

2-6. All names shall be typed or printed below the signature.

2-7. The Bid shall contain an acknowledgment of receipt of all Addenda (the numbers of which shall be filled in on the Bid Form).

2-8. The address to which communications regarding the Bid shall be shown on the signature page of the Bid Proposal.

3. MODIFICATION AND WITHDRAWAL OF BIDS

3-1. The Owner may waive any informalities or minor defects or reject any and all bids. Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No bidder may withdraw a bid within 60 days, after the actual date of the opening thereof. Should there be reasons why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the Owner and the lowest qualified Bidder.

4. EXAMINATION OF CONTRACT DOCUMENTS AND SITE

4-1. Before submitting a bid, each Bidder shall (a) examine the Contract Documents thoroughly, (b) visit the site to familiarize himself with local conditions that may in any manner affect cost, progress or performance of the Work, (c) familiarize himself with Federal, State and local laws, ordinances, rules and regulations that may in any manner affect cost, progress or performance of the work; and (d) study and carefully correlate Bidder’s observations with the requirements of the Contract Documents.

4-2. The contract documents contain the provisions required for the construction of the project. Information obtained from an officer, agent, or employee of the Owner or any other person shall not affect the risks or obligations assumed by the Contractor or relieve him from fulfilling any of the conditions of the contract.

5. PERFORMANCE BOND AND PAYMENT BOND. A performance bond and a payment bond, each in the amount of 100 percent of the contract price, with a corporate surety approved by the Owner, will be required for the faithful performance of the contract.
6. **POWER OF ATTORNEY.** Attorneys-in-fact who sign bid bonds, or performance bonds and payment bonds shall file with each bond a certified and effective dated copy of their power of attorney.

7. **AWARD OF CONTRACT**

7-1. Within forty-five (45) days after the opening of Bids, award of the contract will be made to the lowest, responsive, responsible Bidder. The lowest bidder will be based on the Total Bid price indicated on the Bid Proposal Form.

7-2. In order to be considered responsive, a Bid must:

7-2-1. Conform in all respects to the conditions in the Advertisement for Bids and these Information to Bidders;

7-2-2. Conform in all respects to all other requirements in the Contract Documents.

7-3. In order to be considered responsible, a Bidder must establish to the complete satisfaction of the Owner as a minimum, that he has:

7-3-1. Adequate financial resources to meet his Contract obligations and maintain them for the contract period;

7-3-2. Adequate equipment to perform the work properly and within the time prescribed in the contract;

7-3-3. The necessary experience and technical qualifications in the type of work provided for in the Contract.

7-4. The Owner reserves the right to reject all Bids, or any bid not in compliance with the contract Documents, and to waive any informalities in Bid Received.

7-5. No Bids will be considered in which all of the items given in the Estimate of Quantities are not filled out. Bidders are cautioned not to attach any conditions, limitations or provisions to the proposal as such conditions, limitations or provisions will render their bid informal and cause its rejection.

8. **EXECUTION OF AGREEMENT**

8-1. The party to whom the contract is awarded will be required to execute the Agreement and obtain the performance bond and payment bond within 10 calendar days from the date when notice of award is delivered to the Bidder. The notice of award shall be accompanied by the necessary Agreement and bond forms. If any bidder fails to perform his agreement to execute a
contract and furnish a performance bond and a payment bond as stated in his bid, his bid deposit shall become and be the property of the Owner as liquidated damages, provided that, in case of death, disability or other unforeseen circumstances affecting the Bidder, his bid deposit may be returned to him provided further that the amount of the bid deposit to be retained shall not exceed the difference between the low bid and the bid of the next lowest eligible bidder.

8-2. The Owner within 15 days of receipt of acceptable performance bond, payment bond and Agreement signed by the party to whom the Agreement was awarded shall sign the Agreement and return to such party an executed duplicate of the Agreement. Should the Owner not execute the Agreement within such period, the Bidder may by written notice withdraw his signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the Owner.

9. NOTICE TO PROCEED. The Notice to Proceed will be issued within 10 days of the execution of the Agreement by the Owner. Should there be reasons why the Notice to Proceed cannot be issued within such period, the time may be extended by mutual agreement between the Owner and the Contractor. If the Notice to Proceed has not been issued within the 10 day period or within the period mutually agreed upon the Contractor may terminate the Agreement without further liability on the part of either party.

10. ESTIMATED QUANTITIES. The quantities set forth are estimates of the quantities to be used. The Owner reserves the right to delete work items and increase or decrease quantities within any work item. When accepted quantities of work vary from the quantities in the bid schedule, the Contractor shall accept as payment in full, so far as contract items are concerned, payment at the original contract unit prices for the accepted quantities of work done.

11. AVAILABLE FUNDS. Only a certain amount of money is available for this project. The Owner reserves the right to eliminate any portion of the work under this Contract in order to bring the total expenditure within the amount available for the project or to comply with any conditions or permits obtained for this project, and to limit the prosecution of the work to such points and in such order as may be directed, without any adjustments in the contract prices for the items, unless otherwise specified.

12. STATE WAGE RATES

12-1. Attention is called to the fact that minimum State Wage Rates are established for the project as set forth in the Contract Documents, Section L.

12-2. It is the responsibility of the Bidder, before bid opening, to request, if necessary, any additional information on State Wage Rates for those tradespeople who are not covered by
the Applicable Wage Decision, but who may be employed for the proposed work under this contract.

13. STATE TAXES. This project is exempt from State Sales and Use or Excise Taxes to the extent allowed by law.

14. QUALIFICATIONS OF BIDDERS. The Owner may make such investigations as he deems necessary to determine the ability of the Bidder to perform the work and the Bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner deserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the Agreement and to complete the work contemplated therein.

15. CONDITIONAL OR QUALIFIED BIDS. A conditional or qualified bid will not be accepted.

16. MASSACHUSETTS BIDDING LAWS. This contract is being bid on under the provisions of Massachusetts General Laws, Chapter 30 Section 39M(a).

17. LAWS AND REGULATIONS. All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout.

18. EQUAL EMPLOYMENT AND AFFIRMATIVE ACTION. This project is subject to the Equal Employment Opportunity Requirements of Presidential Executive Order 11246 as amended by Executive Order 11375. On this Contract, percentage goals for business activity to be performed by Minority Business Enterprise(s) shall not be less than the following percentages.

MINORITY CONTRACTOR 10%
WOMAN CONTRACTOR 5%

At least one half of foregoing percentage shall be in the form of work as a contract.

19. LIMITATIONS OF DATA PRESENTED.

19-1. Drawings, surveys, measurements, dimensions, calculations, estimates, borings and statements as to the condition under which the work is to be performed are believed to be correct.

19-2. Wherever existing conditions or construction not required as part of the work of the contract are shown on the drawings, they are so shown as a source of information to the Bidder. The Owner, believing such information to be substantially correct assumes no responsibility therefor.
19-3. The Bidder shall examine the Contract Documents and site as stated in Article 4. For the purposes of comparing the several proposals, bids shall be based on the data presented and the Bidder’s examination of the site.

19-4. Proposal shall be based upon the bidding drawings included with the Specifications as issued to all bidders, which drawings may be modified by addenda issued by the Owner during the bidding period, and later will, as modified by the addenda, become the contract drawings.

19-5. The locations of all utilities are obtained from the best available sources, and are to be considered as approximate insofar as size, location and elevation are concerned. Furthermore, it is expressly understood that there may be utilities in existence other than those shown on the drawings.

20. ADDENDA AND INTERPRETATIONS

20-1. All questions by prospective bidders as to the interpretation of the Contract Documents shall be submitted in writing to the Owner and shall be in their possession at least ten days before the date herein set for the receipt of general or subbids. The Owner will then mail via certified mail with return receipt requested, to bidders who have taken out the contract documents, at the addresses given by them, not less than four calendar days before said date, interpretations of all questions so raised which, in their opinion, require interpretation. Oral interpretation given to perspective bidders will have no standing.

20-2. Each Bidder shall be responsible for determining that he has received all addenda issued.

21. SAFETY AND HEALTH REGULATIONS. This project is subject to all of the safety and health regulations (See 29 CFR Part 1926 and all subsequent amendments) as promulgated by the United States Department of Labor on July 24, 1974. Contractors are urged to become familiar with the requirements of these regulations.

22. ACCESS TO WORK. The Contractor shall provide at all times proper facilities for access and inspection by representatives of any Federal or State agencies having jurisdiction over the work of this project.

23. ENGINEER. The Engineer for this project is BEC, Inc., 296 North Main Street, East Longmeadow, MA 01028.

24. TIME FOR COMPLETING WORK. Attention of the Bidder is directed to the time provision for completion of work under the Contract which requires that all work be completed within one thousand one hundred fifty-five (1,155) calendar days from the date of Notice to Proceed. Unless the period for completion is extended otherwise by the CONTRACT DOCUMENTS. The VENDOR will
commence the work required by the CONTRACT DOCUMENTS within ten (10) calendar days after the date of the NOTICE TO PROCEED. The calendar days shall be consecutive. Payment by the Contractor of five hundred ($500.00) dollars for each and every calendar day the Contract extends beyond the stipulated time as liquidated damages is hereby agreed to. The Owner may, at its discretion and in writing, extend the time for completion of work.
C. BID FORMS

Bid Proposal
   Schedule of Prices

Bona Fide Bid Certification

Bid Bond
BID PROPOSAL

Proposal of ____________________________ (hereinafter called "BIDDER") organized and existing under the laws of the State of ____________ doing business as ____________________________ to the Town of Sturbridge (hereinafter called "OWNER").

In compliance with your Advertisement for Bids, BIDDER hereby proposes to perform all WORK for the dredging of Walker Pond in strict accordance with the CONTRACT DOCUMENTS, within the time set forth therein and at the prices stated below.

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

BIDDER hereby agrees to commence WORK under this contract on or before a date to be specified in the NOTICE TO PROCEED and to fully complete the PROJECT within 1,155 consecutive calendar days thereafter. BIDDER further agrees to pay as liquidated damages, the sum of $500.00 for each consecutive calendar day thereafter as provided in the Agreement, Paragraph 3.

BIDDER acknowledges receipt of the following ADDENDUM:

________________________________________________________________________

________________________________________________________________________

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<thead>
<tr>
<th>PAY ITEM</th>
<th>ITEM DESCRIPTION</th>
<th>UNIT PRICES</th>
<th>ESTIMATED AMOUNT</th>
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<tr>
<td>101.</td>
<td>Control of Work at Actual Invoiced Cost Plus Ten Percent</td>
<td>Allowance 50,000</td>
<td>($50,000) $50,000</td>
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<tr>
<td></td>
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<td>and cents</td>
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<td>201.1</td>
<td>Erosion Controls at</td>
<td>L.F.</td>
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<td></td>
<td>dollars</td>
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<td></td>
<td></td>
<td>and cents</td>
<td>($<strong><strong>) $</strong></strong></td>
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<td>Site Clearing, Grubbing and Topsoil Removal at</td>
<td>L.S.</td>
<td>1</td>
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<td></td>
<td></td>
<td>dollars</td>
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<td></td>
<td></td>
<td>and cents</td>
<td>($<strong><strong>) $</strong></strong></td>
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<td>Embankment Formation at</td>
<td>L.S.</td>
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<td></td>
<td></td>
<td>dollars</td>
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<td>and cents</td>
<td>($<strong><strong>) $</strong></strong></td>
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<td>Topsoil Borrow at</td>
<td>C.Y.</td>
<td>1,030</td>
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<td>dollars</td>
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<td></td>
<td></td>
<td>and cents</td>
<td>($<strong><strong>) $</strong></strong></td>
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<td>204.</td>
<td>Riprap at</td>
<td>C.Y.</td>
<td>427</td>
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<td></td>
<td></td>
<td>dollars</td>
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<td></td>
<td>and cents</td>
<td>($<strong><strong>) $</strong></strong></td>
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<td>205.</td>
<td>Chain Link Fence at L.F.</td>
<td>2,400</td>
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<td></td>
<td>______________________ dollars</td>
<td>and ______________________ cents</td>
<td>($____)</td>
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<td>$____</td>
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<td>206.</td>
<td>Underdrain at L.F.</td>
<td>940</td>
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<td>______________________ dollars</td>
<td>and ______________________ cents</td>
<td>($____)</td>
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<td>$____</td>
<td>$____</td>
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<td>207.1</td>
<td>15&quot; Reinforced Concrete Pipe L.F.</td>
<td>430</td>
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<tr>
<td></td>
<td>______________________ dollars</td>
<td>and ______________________ cents</td>
<td>($____)</td>
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<td></td>
<td>$____</td>
<td>$____</td>
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<tr>
<td>207.2</td>
<td>Precast Leaching Catch Basin/manhole Each</td>
<td>3</td>
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<tr>
<td></td>
<td>______________________ dollars</td>
<td>and ______________________ cents</td>
<td>($____)</td>
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<td></td>
<td>$____</td>
<td>$____</td>
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<tr>
<td>209.</td>
<td>Turf Establishment at S.Y.</td>
<td>48,500</td>
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<td></td>
<td>______________________ dollars</td>
<td>and ______________________ cents</td>
<td>($____)</td>
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<td>$____</td>
<td>$____</td>
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<td>Timber Pipe Support Brace at Each</td>
<td>1</td>
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<td></td>
<td>______________________ dollars</td>
<td>and ______________________ cents</td>
<td>($____)</td>
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<td>$____</td>
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<tr>
<td>PAY ITEM</td>
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<td>UNIT PRICES</td>
<td>AMOUNT</td>
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<tr>
<td>ITEM</td>
<td>BID PRICE, WRITTEN IN WORDS</td>
<td>DOLLARS &amp; CENTS</td>
<td>QUANTITY</td>
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<tr>
<td>210.2</td>
<td>Outflow Control Device at Each</td>
<td>2 dollars and cents ($)</td>
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<tr>
<td>300.1</td>
<td>Hydraulic Dredging of Walker Pond at</td>
<td>135,000 C.Y.</td>
<td>300.21 Flocculant at Invoiced Allowance Cost Plus Ten Percent</td>
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<tr>
<td>300.21</td>
<td>Flocculant at Invoiced Allowance Cost Plus Ten Percent</td>
<td>Forty Thousand dollars and zero cents ($40,000)</td>
<td>$40,000</td>
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<td>400.</td>
<td>Containment Area Regrading at</td>
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<td>DOLLARS &amp; CENTS</td>
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<td>ITEM 401</td>
<td>Containment Area Restoration Grading at C.Y.</td>
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<tr>
<td></td>
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<td>$_________ dollars</td>
<td></td>
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</table>
|         |                 | and $_________ cents | ($_____ | $_____

TOTAL $_____ 

Total In Words: _______________________________

_____________________________
The undersigned further certifies under the penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this subsection the word "person" shall mean any natural person, joint venture, partnership, corporation or other business of legal entity.

The undersigned shall certify that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; who, where the provisions of section eight B of chapter twenty-nine apply, shall have been determined to be qualified thereunder and who obtains within ten days of the notification of contract award the security by bond required under section twenty-nine of chapter one hundred and forty-nine; provided that for the purposes of this section the term "security by bond" shall mean the bond of a surety company qualified to do business under the laws of the commonwealth and satisfactory to the awarding authority.

Respectfully submitted:

________________________________________________________________________  _______________________________________________________________________

Address

By ___________________________  _______________________________________________________________________

Title

Date

SEAL

Attest _________________________

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BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned, ________________________________, as Principal, and ________________________________, as Surety, are hereby held and firmly bound unto ________________________________, as OWNER in the penal sum of ________________________________ for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors and assigns.

Signed, this ________________ day of ________________, 19__. The Condition of the above obligation is such that whereas the Principal has submitted to ________________________________ a certain BID attached hereto and hereby made a part hereof to enter into a contract in writing, for the ________________________________,

NOW, THEREFORE,

(a) If said BID shall be rejected, or

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

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

________________________________________ (L.S.)
Principal

________________________________________
Surety

By:____________________________________

IMPORTANT-Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.
D. CONTRACT AND FORMS

Construction Agreement
Payment Bond
Performance Bond
Notice of Award
Acceptance of Notice
Notice of Proceed
State Tax Certification
Certificate by Corporation to Sign Contract
Foreign Corporation Certification
TOWN OF STURBRIDGE, MASSACHUSETTS
CONSTRUCTION AGREEMENT

This AGREEMENT dated this ______ day of______

by and between the TOWN OF STURBRIDGE, a

municipality located in the Commonwealth of Massachusetts, acting

through its Board of Selectmen, hereinafter called the "Owner", and

hereinafter called the "Contractor"

WITNESSETH, that for the consideration hereinafter mentioned, the
Contractor hereby agrees with the Owner to:

1. The CONTRACTOR will commence and complete the
construction of the dredging of Walker Pond in accordance with
the Contract Documents.

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

3. The CONTRACTOR will commence the work required by the
CONTRACT DOCUMENTS within 10 calendar days after the date of the
NOTICE TO PROCEED and will complete the same within 1,155
calendar days unless the period for completion is extended
otherwise by the CONTRACT DOCUMENTS. The CONTRACTOR agrees to
pay as liquidated damages the sum of $500.00 for each consecutive
calendar day thereafter as provided in Section 13 of the contract
Conditions.
4. The CONTRACTOR agrees to perform all of the WORK described in the CONTRACT DOCUMENTS and comply with the terms therein for the sum of $________ or as shown in the BID schedule.

5. The term "CONTRACT DOCUMENTS" means and includes the following:

(A) Advertisement for BIDS
(B) Information for BIDDERS
(C) General Conditions
   Special Conditions - Commonwealth of Massachusetts
   Order of Conditions
   Water Quality Certification
(D) Bid
(E) Bid Bond
(F) Agreement
(G) Payment Bond
(H) Performance Bond
(I) Notice of Award
(J) Notice to Proceed
(K) Contract Conditions
(L) Change Orders
(M) DRAWINGS prepared by BEC, Inc. titled Walker Pond Dredging Plan
(N) SPECIFICATIONS prepared or issued by BEC, Inc. dated June, 1990
6. Final payment on this contract shall release and discharge the OWNER from any and all claims against the OWNER on account of any work performed hereunder, or any alteration hereto.

7. This contract shall be deemed to be a Massachusetts contract and its interpretation and construction shall be governed by the laws of Massachusetts and the Charter and Ordinances of the OWNER.

IN WITNESS WHEREOF the OWNER has caused these presents to be signed in triplicate and the said CONTRACTOR has caused these presents to be signed in triplicate and its official seal to be hereto affixed by its officer or agent thereunto duly authorized (by the attached corporate resolution). This instrument shall take effect as a sealed instrument.

CONTRACTOR:

COMPANY NAME

AUTHORIZED SIGNATURE

it's

TITLE

DATE
PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a_________________________hereinafter called Principal

and

(Name of Surety)

(Address of Surety)

hereinafter called OWNER, in the penal sum of

Dollars ($_______) in lawful money of the United States, for

the payment of which sum well and truly to be made, we bind

ourselves, successors, and assigns, jointly and severally firmly

by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the

Principal entered into a certain contract with the OWNER, dated

day of___19___, a copy of which is

hereto attached and made a part hereof for the construction of:

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 thereunder or 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 contract or to the WORK or to the SPECIFICATIONS.

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

IN WITNESS WHEREOF, this instrument is executed in _______ counterparts, each one of which shall be deemed an original, this the _______ day of ______ of 19__. 

ATTEST:

----------------------------------
Principal

(Principal) Secretary
(SEAL)

By

(Address)

(Witness as to Surety)

(Address)

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

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

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a hereinafter called Principal, and

(Name of Owner)

(Address of Owner)

hereinafter called OWNER, in the penal sum of__________ Dollars $__________

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

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the __________ day of __________ 19________ a copy of which is hereto attached and made a part hereof for the construction of:

____________________________________________________________________

____________________________________________________________________

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

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

IN WITNESS WHEREOF, this instrument is executed in counterparts, each one of which shall be deemed an original, this the ___________ day of ___________ 19__.

ATTEST:

(Principal)

By ____________________________

(Principal Secretary)

(SEAL)

(Witness as to Principal)

(Address)

(Address)

(Surety)

ATTEST:

(Surety) Secretary

(SEAL)

Witness as to Surety

By Attorney-in-Fact

(Address)

(Address)
NOTE: Date of BOND must not be prior to date of Contract.
In CONTRACTOR is Partnership, all partners should execute BOND.

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

To: __________________________
________________________________
________________________________
________________________________
________________________________

PROJECT Description____________________________________

________________________________

The OWNER has considered the BID submitted by you for the above described WORK in response to its Advertisement for Bids dated ________________ 19__ and Information for Bidders.

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

You are required by the Information for Bidders to execute the Agreement and furnish the required CONTRACTOR’S Performance BOND, Payment BOND and certificates of insurance within ten (10) calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said BONDS within ten (10) days from the date of this Notice, said OWNER will be entitled to consider all your rights arising out of the OWNER’S acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The OWNER will be entitled to such other rights as may be granted by law.

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

Dated this ________ day of __________________, 19__

__________________________________________________

By_________________________________________________

Title______________________________________________
ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged by

this the ____________ day of __________________, 19__

By__________________________

Title________________________
NOTICE TO PROCEED

To: ___________________________ Date: ___________________________

______________________________
Project: _______________________

______________________________

You are hereby notified to commence WORK in accordance with the Agreement dated __________, 19____ on or before __________, 19____, and you are to complete the WORK within __________ consecutive calendar days thereafter. The date of completion of all WORK is therefore __________, 19____, (1,155 days from the time of Notice to Proceed).

Owner

By ____________________________
Title ____________________________

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE TO PROCEED is hereby acknowledged by

______________________________
this the _______________________

day of _______________________

19____

By ____________________________
Title ____________________________
STATE TAX CERTIFICATION

Pursuant to M.G.L. Ch. 62 C, Sec. 49A, I certify under the penalties of perjury that I, to my best knowledge and belief, have filed all state tax returns and paid all state taxes required under law.

______________________________  ________________________________
Social Security Number or State Identification Number
Federal Identification Number

By: ____________________________

Company Name: ____________________________
Address: ____________________________
City: ____________________________
Telephone No. ____________________________
Certificate by Corporation to Sign Contract

At a duly authorized meeting of the Board of Directors of the

(Name of Corporation) held on

(Date)

At which all the Directors were present or waived notice, it was voted that,

(Name) (Officer)

of this company, be and he hereby is authorized to execute contracts and bonds in the name and behalf of said company, and affix its Corporate Seal thereto, and such execution of any contract or obligation in this company's name on its behalf by such (Officer) under seal of the company, shall be valid and binding upon this company,

A TRUE COPY,

ATTEST: (Clerk)

PLACE OF BUSINESS

DATE OF THIS CONTRACT

I hereby certify that I am the clerk of the that

is the duly elected of said company, and the above vote has not been amended or rescinded and remains in full force and effect as of the date of this contract.

(Clerk) (Corporate Seal)
Foreign Corporation Certification

AFFIDAVIT OF COMPLIANCE
Form AF-4A 1/78

EXECUTIVE OFFICE FOR
ADMINISTRATION AND FINANCE

The Commonwealth of Massachusetts

____

MASSACHUSETTS BUSINESS CORPORATION

____

NON-PROFIT CORPORATION

____

FOREIGN (non-Massachusetts) Corporation

1. _________________, ___President ___Clerk of
__________________________ whose principal office is

(Name of Corporation)

located__________________________

do hereby certify that the above named Corporation has filed with
the State Secretary all certificates and annual reports required
by Chapter 156B, Section 109 (Business Corporation), by Chapter
181, Section 4 (Foreign Corporation), or by Chapter 180, Section
26A (non-profit Corporation) of the Massachusetts General Laws.

SIGNED UNDER THE PENALTIES OF PERJURY THIS ___ day of __________, 19____.

Signature of responsible Corporate Officer__________________________
E. CONTRACT CONDITIONS

1. Definitions
2. Additional Instructions and Detail Drawings
3. Schedule, Reports and Records
4. Drawings and Specifications
5. Materials, Services and Facilities
6. Inspection and Testing
7. Substitutions
8. Patents
9. Surveys, Permits, Regulations
10. Protection of Work, Property, Persons
11. Supervision by Contractor
12. Changes in Contract Price
13. Time for Completion and Liquidated Damages
14. Correction of Work
15. Payments to Contractor
16. Acceptance of Final Payment as Release
17. Insurance
18. Contract Security
19. Assignments
20. Indemnification
21. Separate Contracts
22. Subcontracting
23. Engineers Authority
24. Land & Rights-of-Way
25. Guarantee
26. Taxes
27. Additional Provisions
28. Shop Drawings
29. Samples
30 Laboratory Tests

Appendix A - Change Order Form
CONTRACT CONDITIONS

1. DEFINITIONS

1.1 Wherever used in the Contract Documents, the following terms shall have the meanings indicated, which shall be applicable to both the singular and plural thereof:

1.2 Addenda - Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the Contract Documents, Drawings and Specifications, by additions, deletions, clarifications or corrections.

1.3 Bid - The offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the work to be performed.

1.4 Bidder - Any person, firm or corporation submitting a Bid for the work.

1.5 Bonds - Bid, Performance, and Payment Bonds and other instruments of security, furnished by the Contractor and his surety in accordance with the Contract Documents.

1.6 Change Order - A written order to the Contractor authorizing an addition, deletion or revision in the work within the general scope of the Contract Documents, or authorizing an adjustment in the Contract Price or Contract Time.

1.7 Contract Documents - The contract, including Advertisement for Bids, Information for Bidders, Special Conditions, Bid, Bid Bond, Agreement, Payment Bond, Performance Bond, Notice of Award, Notice to Proceed, Contract Conditions, Change Order, Federal Requirements, Drawings, Specifications and Addenda.

1.8 Contract Price - The total monies payable to the Contractor under the terms and conditions of the Contract Documents.

1.9 Contract Time - The number of calendar days stated in the Contract Documents for the completion of the work.

1.10 Contractor - The person, firm or corporation with whom the Owner has executed the Agreement.

1.11 Drawings - The part of the Contract Documents which show the characteristics and scope of the work to be performed and which have been prepared or approved by the Engineer.
1.12 Engineer - The person, firm or corporation named as such in the Contract Documents.

1.13 Field Order - A written order effecting a change in the work not involving an adjustment in the Contract Price or an extension of the Contract Time, issued by the Engineer to the Contractor during construction.

1.14 Notice of Award - The written notice of the acceptance of the Bid from the Owner to the successful Bidder.

1.15 Notice to Proceed - Written communication issued by the Owner to the Contractor authorizing him to proceed with the work and establishing the date of commencement of the work.

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

1.17 Project - The undertaking to be performed as provided in the Contract Documents.

1.18 Resident Project Representative - The authorized representative of the Owner who is assigned to the Project site or any part thereof.

1.19 Shop Drawings - All drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the Contractor, a Subcontractor, manufacturer, Supplier or distributor, which illustrate how specific portions of the work shall be fabricated or installed.

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

1.21 Subcontractor - An individual, firm or corporation having a direct contract with the Contractor or with any other Subcontractor for the performance of a part of the work at the site.

1.22 Substantial Completion - That date, as certified by the Engineer, when the construction of the Project or a specified part thereof is sufficiently completed, in accordance with the Contract Documents, so that the Project or specified part can be utilized for the purposes for which it is intended.

1.23 Omitted.
1.24 **Supplier** - Any person or organization who supplies materials or equipment for the work, including that fabricated to a special design, but who does not perform labor at the site.

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

1.26 **Written Notice** - Any notice to any party of the Agreement relative to any part of this Agreement in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party at his last given address, or delivered in person to said party or his authorized representative on the work.

1.27 The words "Awarding Authority" or pronoun in place of it shall mean the authorized agent or representative of the Owner as defined herein for which the project shall be undertaken.

1.28 The word "State" shall mean the State or Commonwealth in which the work under this contract is to be performed.

1.29 Whenever the words "as directed", "as permitted", "as required" or words of like effect are used, it shall be understood that the direction, permission or requirements of the Engineer is intended, and similarly the words "approved", "acceptable", "satisfactory" or words of like import shall mean approved or acceptable or satisfactory to the Engineer.

1.30 Whenever the words equivalent "or equal" or words of like import are used, it shall be understood that this means equal in accordance with the following provisions; an item shall be considered equal if, in the opinion of the Engineer; (1) it is at least equal in quality, durability, appearance, strength and design; (2) it will perform at least equally the function imposed by the general design for the public work being contracted for or the material being purchased; and (3) it conforms substantially, even with deviations, to the detailed requirements for the item.

1.31 Whenever any power is possessed by, or act or thing is to be done by the Owner under this Contract, the exercise of such power or the doing of such act or thing by the Awarding Authority shall be a sufficient compliance with
the terms of this contract, unless by law some other officer of the Owner is required to act in the premises.

1.32 Both the address given in the bid upon which this contract is founded and the Contractor's office at or near the site of the work are hereby designated as places to either of which notices, letters, and any other communications to the Contractor shall be certified, mailed or delivered. The delivering to the above-named place, or depositing in a post-paid wrapper directed to the first named place, in any post office box regularly maintained by the Post Office Department, of any notice, letter or other communications to the Contractor, shall be deemed sufficient service thereof upon the Contractor, and the date of said service shall be the date of such delivery or mailing. The first named address may be changed at any time by an instrument in writing, executed and acknowledged by the Contractor and delivered to the Engineer. Nothing herein contained shall be deemed to preclude or render inoperative the service of any notice, letter or other communication upon the Contractor personally.

2. ADDITIONAL INSTRUCTIONS AND DETAIL DRAWINGS

2.1 The Contractor may be furnished additional instructions and detail drawings, by the Engineer, as necessary to carry out the work required by the Contract Documents.

2.2 The additional drawings and instructions thus supplied will become a part of the Contract Documents. The Contractor shall carry out the work in accordance with the additional detail drawings and instructions.

3. SCHEDULES, REPORTS AND RECORDS

3-1. Within ten (10) days after the work has commenced, the Contractor shall submit to the Engineer, for approval, a progress schedule in satisfactory form, showing in detail his proposed progress for the construction of the various parts of the work and the proposed times for receiving the various materials required. He shall, at the end of each month or more often, if required, furnish the Engineer two copies of a chart showing actual progress of the various parts of the work in comparison with the originally proposed progress schedule, as approved.

3-2. The Contractor shall also submit a schedule of payments that he anticipates he will earn during the course of the work.
3.4. The work is to commence on or before the date specified in the Notice to Proceed, unless otherwise ordered in writing by the Engineer. Work shall continue with dispatch to completion and no suspension of work will be allowed without approval of the Engineer.

3.5. No Saturday, Sunday, holiday or work days longer than eight hours requiring the presence of the Engineer, an inspector or observer will be permitted, without prior arrangements with the Engineer, except in the case of an emergency, and then only to the extent that is absolutely necessary, and, if practical, with the written permission of the Engineer. If Saturday, Sunday, holiday or work days longer than eight hours are contemplated, the Contractor shall notify the Engineer not later than Friday of the previous week to allow arrangements to be made for inspection. If the Contractor must work beyond the regular work week in order to complete the project within the contract time, all expenses of the Engineer and his personnel required for inspection or observation will be deducted monthly from any sums due or which will become due to the Contractor.

3.6. Prior to commencing any work at the site requiring the presence of the Engineer or his representative, the Contractor shall notify the Engineer in writing at least 24 hours in advance of the exact date and time on which he intends to start the work.

In the event that the Contractor fails to meet this schedule, the Engineer's on-site time will be assessed to the Contractor and will be deducted from any sums due or which will become due to the Contractor.

4. DRAWINGS AND SPECIFICATIONS

4.1 The intent of the Drawings and Specifications is that the Contractor shall furnish all labor, materials, tools, equipment and transportation necessary for the proper execution of the work in accordance with the Contract Documents and all incidental work necessary to complete the Project in an acceptable manner, ready for use, occupancy, or operation by the Owner.

It is agreed that the Advertisement, Instructions to Bidders, Special Conditions, Accepted Proposal, Drawings, Specifications and the Addenda and interpretations heretofore issued are a part of this contract. Any work shown on the drawings, though not mentioned in the Contract or Specifications, and any work mentioned in the Contract or Specifications, though
not shown on the drawings, is to be executed by the Contractor as a part of this Contract.

4.2 In case of conflict between the Drawings and Specifications, the Specifications shall govern. Figure dimensions on Drawings shall govern over scale dimensions, and detailed Drawings shall govern over general Drawings.

4.3 Any discrepancies found between the Drawings and Specifications and site conditions or any inconsistencies or ambiguities in the Drawings or Specifications shall be immediately reported to the Engineer, in writing, who shall promptly correct such inconsistencies or ambiguities in writing. Work done by the Contractor after his discovery of such discrepancies, inconsistencies or ambiguities shall be done at the Contractor's risk.

5. MATERIALS, SERVICES AND FACILITIES

5.1 It is understood that, except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the work within the specified time.

5.2 Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the work. Stored materials and equipment to be incorporated in the work shall be located so as to facilitate prompt inspection.

5.3 Manufactured articles, materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned, as directed by the manufacturer.

5.4 Materials, supplies and equipment shall be in accordance with samples submitted by the Contractor and approved by the Engineer.

5.5 Materials, supplies or equipment to be incorporated into the work shall not be purchased by the Contractor or the Subcontractor subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.

5.6 All materials are to be the best and of finest quality of their several kinds. The Contractor shall provide facilities and handle all materials, as required for the inspection by the Engineer. Materials which have been disapproved by the Engineer shall be removed from the site of the
work together with all surplus earth and materials which, in the opinion of the Engineer, are unsuitable, or not in conformity with the Contract or Specifications. Disposal of materials shall be without expense to the Owner. The Contractor shall promptly replace any materials rejected or condemned, and shall not be allowed extra time for completion of the work by reason of such rejection.

6. INSPECTION AND TESTING

6.1 All materials and equipment used in the construction of the Project shall be subject to adequate inspection and testing, in accordance with generally accepted standards, as required and defined in the Contract Documents.

6.2 The Owner shall provide all inspection and testing services not required by the Contract Documents.

6.3 The Contractor shall provide, at his expense, the testing and inspection services required by the Contract Documents.

6.4 If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any work to specifically be inspected, tested or approved by someone other than the Contractor, the Contractor will give the Engineer timely notice of readiness. The Contractor will then furnish the Engineer the required certificates of inspection, testing or approval.

6.5 Inspections, tests or approvals by the Engineer, or others, shall not relieve the Contractor from his obligations to perform the work in accordance with the requirements of the Contract Documents.

Should inspections or tests reveal defective work, the defective work shall be made good and unsuitable materials shall be rejected, notwithstanding that such work and materials have been previously overlooked and accepted, or estimated for payment. If the work, or any part thereof, shall be found defective at any time before the final acceptance of the whole work, the Contractor shall, forthwith, make good such defect in a manner satisfactory to the Engineer. Nothing in this contract shall be construed as vesting in the Contractor any right or property in the materials used after they have been attached or affixed to the work or the soil, but all such materials shall, upon being so attached or affixed, become the property of the Owner.

All portions of the work condemned by the Engineer as failing to conform to the Contract Plans or Specifications shall be
taken down and removed, and the Contractor shall promptly replace and re-execute the same, in accordance therewith, and without expense to the Owner, and bear the expense of making good all work or property of other contractors or of the Owner destroyed or damaged by such removal or replacement.

6.6 The Engineer and his representatives will, at all times, have access to the work. In addition, authorized representatives and agents of any participating Federal or State agency or the Owner shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records. The Contractor will provide proper facilities for such access and observation of the work, and also for any inspection or testing thereof.

6.7 If any work is covered contrary to the written instructions of the Engineer, it must, if requested by the Engineer, be uncovered for his observation and replaced at the Contractor's expense.

6.8 If the Engineer considers it necessary or advisable that covered work be inspected or tested by others, the Contractor, at the Engineer's request, will uncover, expose or otherwise make available for observation, inspection or testing, as the Engineer may require, that portion of the work in question, furnishing all necessary labor, materials, tools and equipment. If it is found that such work is defective, the Contractor will bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction. If, however, such work is not found to be defective, the Contractor will be allowed an increase in the Contract Price, or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction and an appropriate Change Order shall be issued.

7. SUBSTITUTIONS

7.1 Whenever a material, article or piece of equipment is identified on the Drawings or Specifications by reference to brand name or catalogue number, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements, and that other products of equal capacities, quality and function shall be considered. The Contractor may recommend the substitution of a material, article, or piece of equipment of equal substance and function for those referred to in the Contract Documents by reference to brand name or catalogue number and if, in the opinion of the Engineer, such material, article, or piece of equipment is of equal substance and function to that
specified, the Engineer may approve its substitution and use by the Contractor. Any cost differential shall be deductible from the Contract Price and the Contract Documents shall be appropriately modified by Change Order. The Contractor warrants that, if substitutes are approved, no major changes in the function or general design of the Project will result. Incidental changes or extra component parts required to accommodate the substitute will be made by the Contractor without a change in the Contract Price or Contract Time.

7.2 Whenever it is written that an equipment manufacturer must have a specified period of experience with his products, equipment which does not meet the experience period can be considered, if the equipment supplier or manufacturer is willing to provide a bond or cash deposit for the duration of the specified time period, which will guarantee replacement of that equipment, in the event of failure.

8. PATENTS

8.1 The Contractor shall pay all applicable royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and save the Owner harmless from loss on account thereof, except that the Owner shall be responsible for any such loss when a particular process, design, or the product of a particular manufacturer or manufacturers is specified, however, if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, he shall be responsible for such loss, unless he promptly gives such information to the Engineer.

9. SURVEYS, PERMITS, REGULATIONS

9.1 The Owner shall furnish all boundary surveys and establish all base lines for locating the principal component parts of the work together with a suitable number of bench marks adjacent to the work as shown in the Contract Documents. From the information provided by the Owner, unless otherwise specified in the Contract Documents, the Contractor shall develop and make all detail surveys needed for construction, such as slope stakes, batter boards, stakes for pile locations and other working points, lines, elevations and cut sheets.

The Contractor shall employ, at his expense, a competent surveyor, registered in the state wherein the work is to be done to perform such duties.

9.2 The Contractor shall carefully preserve bench marks, reference points and stakes and, in case of willful or careless destruction, he shall be charged with the resulting
expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.

9.3 Permits and licenses of a temporary nature necessary for the prosecution of the work shall be secured and paid for by the Contractor, unless otherwise stated in the Contract Documents. Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the Owner, unless otherwise specified. The Contractor shall give all notices and comply with all laws, ordinances, rules and regulations bearing on the conduct of the work, as drawn and specified. If the Contractor observes that the Contract Documents are at variance therewith, he shall promptly notify the Engineer in writing, and any necessary changes shall be adjusted, as provided in Paragraph 12, Changes in Contract Price.

10. PROTECTION OF WORK, PROPERTY AND PERSONS

10.1 The Contractor will be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work. He will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the work, and other persons who may be affected thereby, all the work and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

The Contractor shall be responsible for and pay for all loss or damage to materials and property, whether such are to be incorporated in the work, or are adjacent thereto. The Contractor shall also replace or restore to original condition every public or private way, conduit, catch basin, tree, fence, or other thing injured or interfered with by the Contractor in carrying on the Contract.

10.2 The Contractor will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction. He will erect and maintain, as required by the conditions and progress of the work, all necessary safeguards for safety and protection. He will notify owners of adjacent utilities when prosecution of the work may affect them. The Contractor will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or anyone for whose acts any of them be liable.
except damage or loss attributable to the fault of the Contract Documents or to the acts or omissions of the Owner or the Engineer or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of the Contractor.

10.3 In emergencies affecting the safety of persons or the work or property at the site or adjacent thereto, the Contractor, without special instruction or authorization from the Engineer or Owner, shall act to prevent threatened damage, injury or loss. He will give the Engineer prompt written notice of any significant changes in the work or deviations from the Contract Documents caused thereby, and a Change Order shall thereupon be issued, covering the changes and deviations involved.

11. SUPERVISION BY CONTRACTOR

11.1. The Contractor will supervise and direct the work. He will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The Contractor will employ and maintain on the work a qualified supervisor or superintendent who shall have been designated in writing by the Contractor as the Contractor's representative at the site. The supervisor shall have full authority to act on behalf of the Contractor and all communications given to the supervisor shall be as binding as if given to the Contractor. The supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the work.

11.2 The Contractor shall employ only competent persons to do the work and, whenever the Engineer shall notify the Contractor, in writing, that any person on the work is, in his opinion, incompetent, unfaithful, disorderly or otherwise unsatisfactory or not employed in accordance with the provisions of this contract, such persons shall be discharged from the work and shall not again be employed on it, except with the consent of the Engineer.

12. CHANGES IN CONTRACT PRICE

12-1. The Contract Price may be changed only by a Change Order. The value of any work covered by a Change Order, or of any claim for increase or decrease in the Contract Price, shall be as follows:

12-2. Payment of Change Orders. Payment of all change orders shall be in accordance with the relevant provisions of Massachusetts General Laws, Chapter 30, Section 39G as amended from time to time.
The procedure for submitting a Change Order shall be as follows: Contractor to make recommendations to on-site representative, Change Order to be submitted to the Town and finally to Division of Waterways for review and approval. No additional payment will be made without written approval of the Change Order.

Payment of Change orders shall be made in accordance with one of the following three methods:

a. Existing unit prices as set forth in the contract; or
b. Agreed upon lump sum or unit prices; or
c. Time and materials

12-2-1. Payment For Work Where There Is A Unit Price In The Contract. Where the contract contains a unit price for work and the Engineer orders a change for work of the same kind as other work contained in the contract and is performed under similar physical conditions, the Contractor may accept full and final payment at the contract unit price(s) for the acceptable quantities.

12-2-2. Payment For Work For Which No Price Is Contained In The Contract. If the Engineer directs, the Contractor shall submit promptly in writing to the Engineer an offer to do the required work on a lump sum or unit price basis, as specified by the Engineer. The stated price, either lump sum or unit price, shall be divided so as to show that it is the sum of:

1. The estimated cost of Labor, plus
2. Direct Labor Cost, plus
3. Material and Freight Costs, plus
4. Equipment costs, plus
5. An amount not to exceed 20 percent of the sum of Items (1) through (4) for overhead and profit, plus (if applicable),
6. In the case of work done by a subcontractor, an amount not to exceed 7½ percent, for the general contractor of the sum of Items (1) through (4) for his overhead and profit, less, if applicable,
7. Credits for work deleted from the contract.

12-2-3. Payment For Work On A Time And Materials Basis. Unless an agreed lump sum and/or unit price is obtained from above and is so stated in the change price, the Contractor, or any subcontractor, shall accept as full payment an amount equal to:

1. The estimated cost of Labor, plus
2. The Direct Labor Costs, plus
(3) Equipment Costs, plus
(4) Material and Freight Costs, plus
(5) An amount not to exceed 20 percent of the sum of Items (1) through (4) for overhead and profit, plus, if applicable,
(6) In the case of work done by a subcontractor, an amount not to exceed 7½ percent, for the general contractor of the sum of Items (1) through (4) for his overhead and profit, less, if applicable,
(7) Credit for work deleted from the Contract.

12-2-4. Explanation Of Items (1) thru (7) As Defined In 12-2-2 and 12-2-3 above.

(1) Labor - Only those workers employed on the project who are doing the extra work, including the foreman in charge, are allowable. General foremen, superintendents, or other supervisory personnel are considered to be included in the overhead mark-up as provided in Items (5) and/or (6). Hourly labor rates in excess of those as listed in the contract wage rates (Federal or State, whichever applies) require documentation. As a minimum, an explanation and the appropriate copy of the certified payroll are required.

(2) Direct Labor Costs - These costs are limited to those which are required in the contract document. Coverage in excess of the contract provisions, secured by the Contractor/subcontractor(s) at his option, will not be included for payment. The following is a list of typical direct labor charges.

Workmen's Compensation

Federal/State: Social Security Tax and Unemployment Tax;

Health, Welfare and Pension Benefits; (this cost is included in the wage rates appearing in the Mass. Wage Rates of the contract specifications)

Liability Insurance: Bodily Injury;
Excess Umbrella;
Property Damage;
Public

Blasters Insurance - If applied to any
required direct labor costs.

Builders Risk Insurance -

Experience Modification Insurance -

Surcharges -

Following award and prior to execution of a construction contract, the Contractor and filed sub-bidders (where applicable) shall submit for review by the Owner, documentation to establish the mark-up percentage(s).

The documented direct labor mark-up for this contract may be adjusted on an annual basis as measured from the date the contract is executed. The contract agreement will provide for the establishment of the Direct Labor Cost percentage.

(3) Material and Freight - Only those materials required as a result of the change order and reasonable freight charges for delivery of same are allowable.

(4) Equipment - Only the equipment required as a result of the change order is allowable. Equipment rental rates shall be governed by the current Nielson/Dataquest Rental Rate Bluebook for Construction Equipment (the "Bluebook"). In determining the rental rate, the following shall apply:

a. For equipment already on the project - the monthly prorated rental rate by the hourly use shall be applicable;

b. For equipment not on the project the daily rate, the weekly rate, or monthly rate will prevail, whichever will prove to be most cost effective. Small tools and manual equipment are examples of costs not allowable under this item. These costs are considered to be included in the overhead mark-up as provided in Items (5) and/or (6).

(1 month [normal use] = 176 hours)

(5) & (6) Overhead and Profit - All other costs not previously mentioned are considered to be included in this item, be it for the General Contractor or subcontractor(s).
Credits - Work deleted, material and equipment removed from the contract, stored and/or returned shall be credited to the cost of the change order, less costs.

12-3. Itemized Statements And Access To Accounts. The Contractor shall furnish itemized statements of the cost of the work ordered and shall give the Engineer access to all accounts, bills and vouchers relating thereto; and unless the Contractor shall furnish such itemized statements, and access to all accounts, bills and vouchers, he shall not be entitled to payment for any items of extra work for which such information is sought by the Engineer.

12-4. Change Order Preparation. The change order will be prepared in such manner as to clearly separate the various methods for which costs are to be applied, viz:

1. Costs Eligible for EPA/State funding;
2. Costs Eligible for Chapter 557 State funding;
3. Costs Eligible for funding under other reimbursable programs;
4. Ineligible costs.

13. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

13.1. The date of beginning and the time for completion of the work are essential conditions of the Contract Documents and the work embraced shall be commenced on a date specified in the Notice to Proceed.

13.2. The Contractor will proceed with the work at such rate of progress to insure full completion within the Contract Time. It is expressly understood and agreed, by and between the Contractor and the Owner, that the Contract Time for the completion of the work described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the work.

13.3. If the Contractor shall fail to complete the work within the Contract Time, or extension of time granted by the Owner, then the Contractor will pay to the Owner the amount for liquidated damages, as specified in the Bid for each calendar day that the Contractor shall be in default after the time stipulated in the Contract Documents.
13.4. The Contractor shall not be charged with liquidated damages or any excess cost when the delay in completion of the work is due to the following, and the Contractor has promptly given written notice of such delay to the Owner or Engineer.

13.4.1. To any preference, priority or allocation order duly issued by the Owner.

14. CORRECTION OF WORK

14.1. The Contractor shall promptly remove from the premises all work rejected by the Engineer for failure to comply with the Contract Documents, whether incorporated in the construction or not, and the Contractor shall promptly replace and re-execute the work in accordance with the Contract Documents, and without expense to the Owner, and shall bear the expense of making good all work of other Contractors destroyed or damaged by such removal or replacement.

14.2. All removal and replacement work shall be done at the Contractor's expense. If the Contractor does not take action to remove such rejected work within ten (10) days after receipt of written notice, the Owner may remove such work and store the materials at the expense of the Contractor.

15. PAYMENTS TO CONTRACTOR

15.1. At least ten (10) days before each progress payment falls due (but not more often than once a month), the Contractor will submit to the Engineer a partial payment estimate filled out and signed by the Contractor covering the work performed during the period covered by the partial payment estimate and supported by such data as the Engineer may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the work but delivered and suitably stored at or near the site, the partial payment estimate shall also be accompanied by such supporting data, satisfactory to the Owner, as will establish the Owner's title to the material and equipment and protect his interest therein, including applicable insurance.

Payments to the Contractor are governed by Massachusetts General Laws, Chapter 30, Section 39G, and are recited in full in another section of these specifications. The Owner shall withhold from each payment due the Contractor an amount equal to 5% of the invoice pending acceptance of the project by the Owner.

15.2. The request for payment may also include an allowance for the cost of such major materials and equipment which are suitably stored either at or near the site.
15.3. Prior to Substantial Completion, the Owner, with the approval of the Engineer and with the concurrence of the Contractor, may use any completed or substantially completed portions of the work. Such use shall not constitute an acceptance of such portions of the work.

15.4. The Owner shall have the right to enter the premises for the purpose of doing work not covered by the Contract Documents. This provision shall not be construed as relieving the Contractor of the sole responsibility for the care and protection of the work, or the restoration of any damaged work, except such as may be caused by agents or employees of the Owner.

15.5. The Contractor will indemnify and save the Owner or the Owner's agents harmless from all claims growing out of the lawful demands of Subcontractors, laborers, workmen, mechanics, materialmen, and furnishers of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the work. The Contractor shall, at the Owner's request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged or waived.

Payments to subcontractors are governed by Massachusetts General Laws, Chapter 30, Section 39 F, and are recited in full in another section of these specifications.

16. ACCEPTANCE OF FINAL PAYMENT AS RELEASE

16.1. The acceptance by the Contractor of final payment shall be and shall operate as a release to the Owner of all claims and all liability to the Contractor other than claims in stated amounts as may be specifically excepted by the Contractor for all things done or furnished in connection with this work and for every act and neglect of the Owner and others relating to or arising out of this work. Any payment however, final or otherwise, shall not release the Contractor or his sureties from any obligations under the Contract Documents or the Performance Bond and Payment Bonds.

17. INSURANCE

17.1. The Contractor shall purchase and maintain such insurance as will protect him from claims set forth below which may arise out of or result from the Contractor's execution of the work, whether such execution be by himself or by any Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:
1. **Workmen’s Compensation** and other benefits as required under Chapter 152 of the Laws, as amended, and Section 34A of Chapter 149 of the General Laws.

2. **Employer’s Liability** with a limit of at least $300,000 each accident.

3. **Comprehensive Public Liability** including Contractor’s Liability as applicable to the Contractor’s obligations; Elevators (if any on the Work): Completed Operations and Products Liability: all on the occurrence basis with Personal Injury coverage and Broad Form Property Damage. Remove the XCU exclusions relating to Explosion, Collapse, and Underground Property Damage. Completed Operations Liability shall be kept in force for at least two years after the date of final completion.

<table>
<thead>
<tr>
<th>Category</th>
<th>Coverage</th>
<th>Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Injury and Accidental Death - General Liability</td>
<td>Each person/aggregate $500,000/$1,000,000</td>
<td></td>
</tr>
<tr>
<td>Property Damage - General Liability</td>
<td>Each Occurrence/aggregate $500,000/$1,000,000</td>
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</tr>
</tbody>
</table>

18. **CONTRACT SECURITY**

18.1. The Contractor shall within ten (10) days after the receipt of the Notice of Award furnish the Owner with a Performance Bond and a Payment Bond in penal sums equal to the amount of the Contract Price, conditioned upon the performance by the Contractor of all undertakings, covenants, terms, conditions and agreements of the Contract Documents, and upon the prompt payment by the Contractor to all persons supplying labor and materials in the prosecution of the work provided by the Contract Documents. Such Bonds shall be executed by the Contractor and a corporate bonding company licensed to transact such business in the state in which the work is to be performed and named on the current list of "Surety Companies Acceptable on Federal Bonds" as published
in the Treasury Department Circular Number 570. The expense of these Bonds shall be borne by the Contractor. If, at any time, a surety on any such Bond is declared a bankrupt or loses its right to do business in the state in which the work is to be performed or is removed from the list of Surety Companies accepted on Federal Bonds, Contractor shall within ten (10) days after notice from the Owner to do so, substitute an acceptable Bond (or Bonds) in such form and sum and signed by such other surety or sureties as may be satisfactory to the Owner. The premiums on such Bond shall be paid by the Contractor. No further payments shall be deemed due, nor shall be made until the new surety or sureties shall have furnished an acceptable Bond to the Owner.

19. ASSIGNMENTS

19.1. Neither the Contractor nor the Owner shall sell, transfer, assign or otherwise dispose of the Contract or any portion thereof, or of his right, title or interest therein, or his obligations thereunder, without written consent of the other party.

20. INDEMNIFICATION

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

20.2. In any and all claims against the Owner or the Engineer, or any of their agents or employees, by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workmen's compensation acts, disability benefit acts, or other employee benefits acts.

20.3. The obligation of the Contractor under this paragraph shall not extend to the liability of the Engineer, his agents or employees arising out of the preparation or appro-
val of maps, Drawings, opinions, reports, surveys, Change Orders, designs or Specifications.

21. SEPARATE CONTRACTS

21.1. The Owner reserves the right to let other contracts in connection with this Project. The Contractor shall afford other Contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work, and shall properly connect and coordinate his work with theirs. If the proper execution or results of any part of the Contractor's work depends upon the work of any other Contractor, the Contractor shall inspect and promptly report to the Engineer any defects in such work that render it unsuitable for such proper execution and results.

21.2. The Owner may perform additional work related to the Project by himself, or he may let other contracts containing provisions similar to these. The Contractor will afford the other Contractors who are parties to such Contracts (or the Owner, if he is performing the additional work himself), reasonable opportunity for the introduction and storage of materials and equipment and the execution of work, and shall properly connect and coordinate his work with theirs.

21.3 If the performance of additional work by other Contractors or the Owner is not noted in the Contract Documents prior to the execution of the Contract, written notice thereof shall be given to the Contractor prior to starting any such additional work. If the Contractor believes that the performance of such additional work by the Owner or others involves him in additional expense or entitles him to an extension of the Contract Time, he may make a claim therefor as provided in Sections 12 and 13.

22. SUBCONTRACTING

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

22.2. The Contractor shall not award work to Subcontractor(s) in excess of fifty (50%) percent of the Contract Price, without prior written approval of the Owner.

22.3. The Contractor shall be fully responsible to the Owner for the acts and omissions of his Subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.
22.4. The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind Subcontractors to the Contractor by the terms of the Contract Documents, insofar as applicable to the work of Subcontractors, and to give the Contractor the same power as regards terminating any subcontract that the Owner may exercise over the Contractor and under any provision of the Contract Documents.

22.5. Nothing contained in this Contract shall create any contractual relation between any Subcontractor and the Owner.

23. ENGINEER'S AUTHORITY

23.1. The Engineer shall act as the Owner’s representative during the construction period. He shall decide questions which may arise as to quality and acceptability of materials furnished and work performed. He shall interpret the intent of the Contract Documents in a fair and unbiased manner. The Engineer will make visits to the site and determine if the work is proceeding in accordance with the Contract Documents.

23.2. The Contractor will be held strictly to the intent of the Contract Documents in regard to the quality of materials, workmanship and execution of the work. Inspections may be made at the factory or fabrication plant or the source of material supply.

23.3. The Engineer will not be responsible for the construction means, controls, techniques, sequences, procedures or construction safety.

23.4. The Engineer shall promptly make decisions relative to interpretation of the Contract Documents.

24. LAND AND RIGHTS-OF-WAY

24.1. Prior to issuance of Notice to Proceed, the Owner shall obtain all land and rights-of-way necessary for carrying out and for the completion of the work to be performed pursuant to the Contract Documents, unless otherwise mutually agreed.

24.2. The Owner shall provide to the Contractor information which delineates and describes the lands owned and rights-of-way acquired.

24.3. The Contractor shall provide at his own expense and without liability to the Owner any additional land and
access thereto that the Contractor may desire for temporary construction facilities, or for storage of materials.

25. GUARANTEE

25.1. The Contractor shall guarantee all materials and equipment furnished and work performed for a period of one (1) year from the date of Substantial Completion. The Contractor warrants and guarantees, for a period of one (1) year from the date of Substantial Completion of the system that the completed system is free from all defects due to faulty materials or workmanship and the Contractor shall promptly make such corrections as may be necessary by reason of such defects, including the repairs of any damage to other parts of the system resulting from such defects. The Owner will give notice of observed defects with reasonable promptness. In the event that the Contractor should fail to make such repairs, adjustments, or other work that may be made necessary by such defects, the Owner may do so and charge the Contractor the cost thereby incurred. The Performance Bond shall remain in full force and effect through the guarantee period.

26. TAXES

26.1. The Owner is exempt purchaser under the Sales Act, Chapter 14 of the Acts of 1966 to the extent that materials and supplies are used or incorporated in the performance of the Contract. The Contractor shall obtain from the Owner an exemption certificate number to be used in lieu of paying the tax on exempted items.

27. ADDITIONAL PROVISIONS.

27-1. Interpretation of Plans and Specifications

The specifications and the drawings and plans are intended to describe and provide for a completed project. They are intended to be complementary and what is called for by either shall be complete in every detail, notwithstanding that every item necessarily involved is not particularly mentioned, and the Contractor shall provide all labor and materials necessary for the entire completion of the work intended to be described.

27-2. Site Regulations

(a) Removal of Rubbish and Temporary Facilities. On or before the completion of the work, the Contractor shall, without charge therefor, dismantle and remove all trailers, buildings and other temporary structures built by him, remove surplus material and rubbish of all kinds from
any grounds which he has occupied and leave the work, grounds and surroundings in clean and neat condition.

(b) Tobacco and Liquor Restrictions. The Contractor shall neither permit nor suffer smoking where it creates a hazard nor the introduction or use of spitzious or intoxicating liquors upon or about the works embraced in this contract or upon any of the ground occupied by him.

(c) Posters. The Contractor shall not permit or suffer any placards, posters or advertisements to be displayed on or about the premises unless approved by the Owner.

28. SHOP DRAWINGS.

28-1. The Contractor shall submit to the Engineer, before any shop work is commenced, four prints or one reproducible and two prints of shop drawings for all items so stated in the specifications as requiring shop drawings. Additional prints for regulatory agencies shall be submitted when indicated in the specifications.

28-2. No shop drawings shall be submitted directly by subcontractors or supplies. All shop drawings shall be submitted through the General Contractor who shall check and verify all field dimensions, check for compliance with the Contract Documents, stamp all drawings to indicate his approval and compliance with the above, and assign a transmittal number to each submission. Numbers shall be assigned in sequence. In the event that a shop drawing is returned marked "Revise and Resubmit" or "Not Accepted" subsequent resubmittals for the same item shall retain the same transmittal number, but shall have an alphabetical suffix (3a, 3b, etc.). With each submission, the Contractor shall, in writing, call the Engineer's attention to any deviations of the Contract Documents and the additional costs, if any, caused by these deviations.

28-3. No portion of the work requiring a shop drawing shall be commenced until the shop drawing has been provided in its entirety. If the first submittal of the shop drawing is marked either "Provide As Shown" or "Provide As Corrected" four prints or the reproduction of the item may begin. If the shop drawings are marked "Revise and Resubmit" or "Not Accepted", two prints or the reproducible only will be returned to the Contractor with notations thereon of corrections required. The Contractor shall cause the necessary corrections to be made and shall resubmit eight prints or one reproducible and four prints with transmittal numbers and letters as defined above. If subsequent resubmittals are still not approved, resubmittals shall be made under the procedure outlined above until final approval is received.
28-4. The Engineer will check and approve shop drawings with reasonable promptness, but his checking shall be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents. The approval of the separate item as such will not indicate approval of the assembly in which the item functions. The Contractor shall make any corrections required by the Engineer and shall return the required number of corrected copies. The Contractor shall direct specific attention in writing or on resubmitted shop drawings to revisions other than the corrections called for by the Engineer on previous submission.

28-5. The Engineer's review of shop drawings shall not relieve the Contractor from his responsibility for any deviations from the requirements of the Contract Documents unless the Contractor has in writing called the Engineer's attention to such deviations at the time of submission and the Engineer has given written approval to the specific deviation, nor shall any approval by the Engineer relieve the Contractor from responsibility for errors or omissions in the shop drawings. The final review for shop drawings by the Engineer shall not operate to relieve the Contractor in any way of his responsibility under this contract for the satisfactory completion of the work, or for the accuracy of the dimensions, details, quantities or for their agreement. No change shall be made in the shop drawings without written consent of the Engineer. The contract price shall include the cost of furnishing all shop drawings and the Contractor shall be allowed no extra compensation thereof.

29. SAMPLES

29-1. The Contractor shall submit to the Engineer for approval, with such promptness as to cause no delay in the work, all samples required by the Contract Documents. All samples shall be checked by and stamped with the approval of the Contractor, identified clearly as to material, manufacturer, any pertinent catalog numbers, the use for which intended, and the section number and paragraph of the specification wherein the material is specified. All samples shall be shipped post and/or freight paid.

29-2. At the time of each submission, the Contractor shall in writing, call the Engineer's attention to any deviations that the samples may have from the requirements of the Contract Documents.
29-3. The Engineer will check and if suitable, approve with reasonable promptness submitted samples, but his checking and approval shall be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents. The approval of a separate item as such will not indicate of the assembly in which the item functions. In the event samples are not approved, the Contractor shall resubmit new samples until approval is obtained.

29-4. No work requiring sample submission shall be commenced until the submission has been approved by the Engineer.

29-5. The Engineer's approval of sample shall not relieve the Contractor from his responsibility for any deviations from the requirements of the Contract Documents unless the Contractor has in writing called the Engineer's attention to such deviations at the time of submission and the Engineer has given written approval of the specific deviations.

30. LABORATORY TESTS

30-1. Any specified laboratory tests of materials and finished articles to be incorporated in the work shall be made by bureaus, laboratories or agencies approved by the Owner and copies of all test reports shall be submitted by the laboratory to the Owner. The cost of the testing, unless otherwise specified, shall be paid by the Owner. The tests and reports thereof shall become the property of the Owner.

30-1-1. The Contractor shall furnish and deliver to the designated testing facility, all samples of materials required for such tests as are required by the Owner or the Engineer.

30-1-2. Any additional tests required beyond those required under this specification may be ordered by the Engineer to settle disagreements with the Contractor regarding the quality of work done. If the work is defective, the Contractor shall pay all costs of the extra tests and shall correct work. If work is satisfactory, the Owner will pay for extra tests.

30-1-3. Where the technical sections of the specifications required that a piece of equipment be tested at the manufacturer's plant or at the site, the cost of such tests shall be included in the price of the equipment.
CHANGE ORDER NO.

PROJECT:

ARCHITECT/ENGINEER:

OWNER:

CONTRACTOR:

CONTRACT DATE:

CONTRACT CHANGES:

ORIGINAL CONTRACT AMOUNT:
PRIOR CHANGE ORDERS (+,-):
THIS CHANGE ORDERS (+,-):

REVISED CONTRACT AMOUNT:

TIME EXTENSION/REDUCTION:

OTHER CONTRACTS AFFECTED:

SUBMITTED BY: (Architect/Engineer Signature) DATE: 

APPROVED BY: (Owner’s Signature) DATE: 

APPROVED BY: (Division of Waterways Signature) DATE: 

ACCEPTED BY: (Contractor’s Signature) DATE: 

DISTRIBUTION: Owner, Architect/Engineer, Division of Waterways, Contractor, Field Rep., Other 

F. GENERAL CONDITIONS

Section 1. Statutory Requirements in General

Section 2. Police Officers
GENERAL CONDITIONS

Section 1. Statutory Requirements in General

The Contractor shall keep himself informed of all existing and future State and National Laws and municipal ordinances and regulations in any manner affecting those engaged or employed in the work, or the materials used or employed in the work, or in any way affecting the conduct of the work, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same and of all provisions required by law to be made a part of this contract, all of which provisions are hereby incorporated by reference and made a part thereof. If any discrepancy or inconsistency is discovered in the drawings or specifications or contract for this work in relation to any such law, ordinance, regulations, order or decree, he shall forthwith report the same to the Engineer in writing. He shall at all times himself observe and comply with, and shall cause all his agents and employees to observe and comply with all such existing and future laws, ordinances, regulations, orders, and decrees; and shall protect and indemnify the Owner and the Engineer and all of its and their officers, agents, and servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by himself or his employees or subcontractors.

All materials furnished and work done are to comply with all State and Federal laws and regulations.

Section 2. Police Officers

Any police officers, reserve, special or otherwise, employed by the Contractor shall be paid the prevailing wage rates paid to regular police officers of the municipality in which the work is to be performed.
G. SPECIAL CONDITIONS - COMMONWEALTH OF MASSACHUSETTS

Section 1. Method of Paying Subcontractors

Section 2. Completion of Public Works
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Section 1. METHOD OF PAYING SUBCONTRACTORS

(General Laws, Chapter 30, Section 39F as most recently amended by Chapter 579 of the Acts of 1980)

1. Every contract awarded pursuant to section forty-four A to H, inclusive, of chapter one hundred and forty-nine shall contain the following subparagraphs (a) through (i) and every contract awarded pursuant to section thirty-nine M of chapter thirty shall contain the following subparagraphs (a) through (h) and in each case those subparagraphs shall be binding between the general contractor and each subcontractor.

(a) Forthwith after the general contractor receives payment on account of a periodic estimate, the general contractor shall pay to each subcontractor the amount paid for the labor performed and the materials furnished by that subcontractor, less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the subcontractor by the general contractor.

(b) Nor later than the sixty-fifth day after each subcontractor substantially completes his work in accordance with the plans and specifications, the entire balance due under the subcontract less amounts retained by the awarding authority as the estimated cost of completing the incomplete and unsatisfactory items of work, shall be due the subcontractor; and the awarding authority shall pay that amount to the general contractor. The general contractor shall forthwith pay to the subcontractor the full amount received from the awarding authority less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the subcontractor by the general contractor.

(c) Each payment made by the awarding authority to the general contractor pursuant to subparagraphs (a) and (b) of this paragraph for the labor performed and the materials furnished by a subcontractor shall be made to the general contractor for the account of that subcontractor; and the awarding authority shall take reasonable steps to compel the general contractor to make each such payment to each such subcontractor. If the awarding authority has received a demand for direct payment from a subcontractor for any amount which has already been included in a payment to the general contractor or which is to be included in a payment to the general contractor for payment to the subcontractor as provided in subparagraphs (a) and (b), the awarding authority shall act upon the demand as provided in this section.
(d) If, within seventy days after the subcontractor has substantially completed the subcontract work, the subcontractor has not received from the general contractor the balance due under the subcontract including any amount due for extra labor and materials furnished to the general contractor, less any amount retained by the awarding authority as the estimated cost of completing the incomplete and unsatisfactory items of work, the subcontractor may demand direct payment of that balance from the awarding authority. The demand shall be by a sworn statement delivered to or sent by certified mail to the awarding authority, and a copy shall be delivered to or sent by certified mail to the general contractor at the same time. The demand shall contain a detailed breakdown of the balance due under the subcontract and also statement of the status of completion of the subcontract work. Any demand made after substantial completion of the subcontract work shall be valid even if delivered or mailed prior to the seventieth day after the subcontractor has substantially completed the subcontract work. Within ten days after the subcontractor has delivered or so mailed the demand to the awarding authority, the general contractor may reply to the demand. The reply shall be by a sworn statement delivered to or sent by certified mail to the awarding authority and a copy shall be delivered to or sent by certified mail to the subcontractor at the same time. The reply shall contain a detailed breakdown of the balance due under the subcontract including any amount due for extra labor and materials furnished to the general contractor and of the amount due for each claim made by the general contractor against the subcontractor.

(e) Within fifteen days after receipt of the demand by the awarding authority, but in no event prior to the seventieth day after substantial completion of the subcontract work, the awarding authority shall make direct payment to the subcontractor of the balance due under the subcontract including any amount due for extra labor and materials furnished to the general contractor, less any amount (i) retained by the awarding authority as the estimated cost of completing the incomplete or unsatisfactory items of work, (ii) specified in any court proceedings barring such payment, or (iii) disputed by the general contractor in the sworn reply; provided, that the awarding authority shall not deduct from a direct payment any amount as provided in part (iii) if the reply is not sworn to, or for which the sworn reply does not contain the detailed breakdown required by subparagraph (d). The awarding authority shall make further direct payments to the subcontractor forthwith after the removal of the basis for deductions from direct payments made as provided in parts (i) and (ii) of this subparagraph.
(f) The awarding authority shall forthwith deposit the amount deducted from a direct payment as provided in part (iii) of subparagraph (e) in an interest-bearing joint account in the names of the general contractor and the subcontractor in a bank in Massachusetts selected by the awarding authority or agreed upon by the general contractor and the subcontractor and shall notify the general contractor and the subcontractor of the date of the deposit and the bank receiving the deposit. The bank shall pay the amount in the account, including accrued interest, as provided in an agreement between the general contractor and the subcontractor or as determined by a decree of a court of competent jurisdiction.

(g) All direct payments and all deductions from demands for direct payments deposited in an interest-bearing account or accounts in a bank pursuant to subparagraph (f) shall be made out of amount payable to the general contractor at the time of receipt of a demand for direct payment from a subcontractor and out of amounts which later become payable to the general contractor and in the order of receipt of such demands from subcontractors. All direct payments shall discharge the obligation of the awarding authority to the general contractor to the extent of the such payment.

(h) The awarding authority shall deduct from payments to a general contractor amounts which, together with the deposits in interest-bearing accounts pursuant to subparagraph (f), are sufficient to satisfy all unpaid balances of demands for direct payment received from subcontractors. All such amounts shall be earmarked for such direct payments, and the subcontractors shall have a right in such deductions prior to any claims against such amounts by creditors of the general contractor.

(i) If the subcontractor does not receive payment as provided in subparagraph (a) or if the general contractor does not submit a periodic estimate for the value of the labor or materials performed or furnished by the subcontractor and the subcontractor does not receive payment for same when due less the deductions provided for in subparagraph (a), the subcontractor may demand direct payment by following the procedure in subparagraph (d) and the general contractor may file a sworn reply as provided in that same subparagraph. A demand made after the first day of the month following that for which the subcontractor performed or furnished the labor and materials for which the subcontractor seeks payment shall be valid even if delivered or mailed prior to the time payment was due on a periodic estimate from the general contractor. Thereafter the awarding authority shall proceed as provided in subparagraph (e), (f), (g) and (h).
Upon substantial completion of the work required by a contract with the Commonwealth, or any agency or political subdivision thereof, for the construction, reconstruction, alteration, remodeling, repair or improvement of public ways, including bridges and other highway structures, sewers and, water mains, airports and other public works, the contractor shall present in writing to the awarding authority its certification that the work has been substantially completed. Within twenty-one days thereafter, the awarding authority shall present to the contractor either a written declaration that the work has been substantially completed or an itemized list of incomplete or unsatisfactory work items required by the contract sufficient to demonstrate that the work has not been substantially completed. The awarding authority may include with such a list a notice setting forth a reasonable time, which shall not in any event be prior to the contract completion date, within which the contractor must achieve substantial completion of the work. In the event that the awarding authority fails to respond, by presentation of a written declaration or itemized list as aforesaid, to the contractor's certification within the twenty-one day period, the contractor's certification shall take effect as the awarding authority's declaration that the work has been substantially completed.

Within sixty-five days after the effective date of a declaration of a substantial completed, the awarding authority shall prepare and forthwith send to the contractor for acceptance a substantial completion estimate for the quantity and price of the work done and all but one percent retaining on that work, including the quantity, price and all but one percent retainage for the undisputed part of each work item and extra work item in dispute but excluding the disputed part thereof, less the estimated cost of completing all incomplete and unsatisfactory work items and less the total periodic payments made to date for the work. The awarding authority also shall deduct from the substantial completion estimate an amount equal to the sum of all demands for direct payment filed by subcontractors and not yet paid to subcontractors or deposited in joint accounts pursuant to section thirty-nine F, but no contract subject to said section thirty-nine F shall contain any other provision authorizing the awarding authority to deduct any amount by virtue of claims asserted against the contract by subcontractors, material suppliers or others.
If the awarding authority fails to prepare and send to the contractor any substantial completion estimate required by this section on or before the date herein above set forth, the awarding authority will pay to the contractor interest on the amount which would have been due to the contractor pursuant to such substantial completion estimate at the rate of three percentage points above the rediscount rate then charged by the Federal Reserve Bank of Boston from such date to the date on which the awarding authority sends that substantial completion estimate to the contractor for acceptance or to the date of payment therefor, whichever occurs first. The awarding authority shall include the amount of such interest in the substantial completion estimate.

Within fifteen days after the effective date of the declaration of substantial completion, the awarding authority shall send to the contractor by certified mail, return receipt requested, a complete list of all incomplete or unsatisfactory work items, and, unless delayed by causes beyond his control, the contractor shall complete all such work items within forty-five days after the receipt of such list or before the then contract completion date, whichever is later. If the contractor fails to complete such work within such time, the awarding authority may, subsequent to seven days' written notice to the contractor by certified mail, return receipt requested, terminate the contract and complete the incomplete or unsatisfactory work items and charge the cost of same to the contractor.

Within thirty days after receipt by the awarding authority of a notice from the contractor stating that all of the work required by the contract has been completed, the awarding authority shall prepare and forthwith send to the contractor for acceptance a final estimate for the quantity and price of the work done and all retainage on that work less all payments made to date, unless the awarding authority's inspection shows that work items required by the contract remain incomplete or unsatisfactory, or that documentation required by the contract has not been completed. If the awarding authority fails to prepare and send to the contractor the final estimate within thirty days after receipt of notice of completion, the awarding authority shall pay to the contractor interest on the amount which would have been due to the contractor pursuant to such final estimate at the rate hereinabove provided from the thirtieth day after such completion until the date on which the awarding authority sends the final estimate to the contractor for acceptance or the date of payment therefor, whichever occurs first, provided that the awarding authority's inspection shows that no work items required by the contract remain incomplete or unsatisfactory. Interest shall not be paid hereunder on amounts for which interest is required to be paid in connection with the substantial completion estimate as hereinabove provided. The awarding authority shall include the
amount of the interest required to be paid hereunder in the final estimate.

The awarding authority shall pay the amount due pursuant to any periodic, substantial completion or final estimate within thirty-five days after receipt of written acceptance for such estimate from the contractor and shall pay interest on the amount due pursuant to such estimate at the rate hereinabove provided from that thirty-fifth day to the date of payment. In the case of periodic payments, the contracting authority may deduct from its payment a retention based on its estimate of the fair value of its claims against the contractor, a retention for direct payments to subcontractors based on demands for same in accordance with the provision of section thirty-nine F, and a retention to secure satisfactory performance of the contractual work not exceeding five percent of the approved amount of any periodic payment, and the same right to retention shall apply to bonded subcontractors entitled to direct payment under section thirty-nine F of chapter thirty; provided, that a five percent value of all items that are planted in the ground shall be deducted from the periodic payments until final acceptance.

No periodic, substantial completion or final estimate or acceptance or payment thereof shall bar a contractor from reserving all rights to dispute the quantity and amount of, or the failure of the awarding authority to approve a quantity and amount of, all or part of any work item or extra work item.

Substantial completion, for the purposes of this section, shall mean either that the work required by the contract has been completed except for work having a contract price of less than one percent of the then adjusted total contract price, or substantially all of the work has been completed and opened to public use except for minor incomplete or unsatisfactory work items that do not materially impair the usefulness of the work required by the contract.

Section 3. CLAIMS FOR UNFORSEEN CONDITIONS

(General Laws, Chapter 30, Section 39N as most recently amended by Chapter 774 of the Acts of 1972)

Every contract subject to section forty-four A of chapter one hundred and forty-nine or subject to section thirty-nine M of chapter thirty shall contain the following paragraph in its entirety and an awarding authority may adopt reasonable rules or regulations in conformity with that paragraph concerning the filing, investigation and settlement of such claims:
If, during the progress of the work, the contractor or the awarding authority discovers that the actual subsurface or latent physical conditions encountered at the site differ substantially or materially from those shown on the plans or indicated in the contract documents either the contractor or the contracting authority may request an equitable adjustment in the contract price of the contract applying to work affected by the differing site conditions. A request for such an adjustment shall be in writing and shall be delivered by the party making such claim to the other party as soon as possible after such conditions are discovered. Upon receipt of such a claim from a contractor, or upon its own initiative, the contracting authority shall make an investigation of such physical conditions, and, if they differ substantially or materially from those shown on the plans or indicated in the contract documents or from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the plans and contract documents and are of such a nature as to cause an increase or decrease in the cost of performance of the work or a change in the construction methods required for the performance of the work which results in an increase or decrease in the cost of the work, the contracting authority shall make an equitable adjustment in the contract price and the contract shall be modified in writing accordingly.

Section 4. CLAIMS FOR DELAY

(General Laws, Chapter 30, Section 390 as added by Chapter 116 of the Acts of 1973)

Every contract subject to the provisions of section thirty-nine M of this chapter or subject to section forty-four A of chapter one hundred forty-nine shall contain the following provisions (a) and (b) in their entirety and, in the event a suspension, delay, interruption or failure to act of the awarding authority increases the cost of performance to any subcontractor, that subcontractor shall have the same rights against the general contractor for payment for an increase in the cost of his performance as provisions (a) and (b) give the general contractor against the awarding authority, but nothing in provisions (a) and (b) shall in any way change, modify or alter any other rights which the general contractor or the subcontractor may have against each other.

(a) The awarding authority may order the general contractor in writing to suspend, delay, or interrupt all or any part of the work for such period of time as it may determine to be appropriate for the convenience of the awarding authority; provided however, that if there is a suspension, delay or interruption for fifteen days or more or due to a failure of the awarding authority to act within the time specified in this contract, the awarding authority shall make an adjustment in the
contract price for any increase in the cost of performance of this contract but shall not include any profit to the general contractor on such increase; and provided further, that the awarding authority shall not make any adjustment in the contract price under this provision for any suspension, delay, interruption or failure to act to the extent that such is due to any cause for which this contract provides for an equitable adjustment of the contract price under any other contract provisions.

(b) The general contractor must submit the amount of a claim under provision (a) to the awarding authority in writing, as soon as practicable after the end of the suspension, delay, interruption of failure to act and, in any event, not later than the date of final payment under this contract and, except for costs due to a suspension order, the awarding authority shall not approve any costs in the claim incurred more than twenty days before the general contractor notified the awarding authority in writing of the act of failure to act involved in the claim.

Section 5. DECISIONS AND APPROVALS BY ENGINEER OR ARCHITECT

(General Laws, Chapter 30, Section 39P, as added by Chapter 116 of the Acts of 1973)

Every contract subject to section thirty-nine M of this chapter or section forty-four A of chapter one hundred forty-nine which requires the awarding authority, any official, its architect or engineer to make a decision on interpretation of the specifications, approval of equipment, material or any other approval, or progress of the work, shall require that the decision be made promptly and, in any event, no later than thirty days after the written submission for decision; but if such decision requires extended investigation and study, the awarding authority, the official, architect or engineer shall, within thirty days after the receipt of the submission give the party making the submission written notice of the reasons why the decision cannot be made within the thirty day period and the date by which the decision will be made.

Section 6. 6 YEAR RECORD KEEPING, STATEMENT OF MANAGEMENT, YEARLY AUDIT

(General Laws, Chapter 30 Section 39R (b through d) as most recently amended.)

(b) Subsection (a)(2) hereof notwithstanding, every agreement or contract awarded or executed pursuant to sections thirty B through thirty P, inclusive, of chapter seven, and pursuant to section thirty-nine M of chapter thirty or to section forty-four A through H, inclusive, of chapter one hundred forty-nine shall provide that:
(1) The contractor shall make, and keep for at least six years after final payment, books, records, and accounts which in reasonable detail accurately and fairly reflect the transactions and dispositions of the contractor, and

(2) until the expiration of six years after final payment, the office of inspector general, and the deputy commissioner of capital planning and operations shall have the right to examine any books, documents, papers or records of the contractor or of his/her subcontractors that directly pertain to, and involve transactions relating to, the contractor or his/her subcontractors, and. (Amended 1984, 484, & 37, approved Jan. 7, 1985 effective 90 days thereafter).

(3) if the agreement is a contract as defined herein, the contractor shall describe any change in the method of maintaining records or recording transactions which materially affect any statements filed with the awarding authority, including in his/her description the date of the change and reasons therefor, and shall accompany said description with a letter from the contractor’s independent certified public accountant approving or otherwise commenting on the changes, and

(4) if the agreement is a contract as defined herein, the contractor has filed a statement of management on internal accounting controls as set forth in paragraph (c) below prior to the execution of the contract, and

(5) if the agreement is a contract as defined herein, the contractor has filed prior to the execution of the contracts and will continue to file annually, an audited financial statement for the most recent completed fiscal year as set forth in paragraph (d) below.

(c) Every contractor awarded a contract shall file with the awarding authority a statement of management as to whether the system of internal accounting controls of the contractor and its subsidiaries reasonably assures that:

(1) transactions are executed in accordance with management’s general and specific authorization;

(2) transactions are recorded as necessary
   i. to permit preparation of financial statements in conformity with generally accepted accounting principles, and
   ii. to maintain accountability for assets;

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(3) access to assets is permitted only in accordance with management’s general or specific authorization; and

(4) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action was taken with respect to any difference.

Every contractor awarded a contract shall also file with the awarding authority a statement prepared and signed by an independent certified public accountant, stating that he/she has examined the statement of management on internal accounting controls, and expressing an opinion as to

(1) whether the representations of management in response to this paragraph and paragraph (b) above are consistent with the result of management’s evaluation of the system of internal accounting controls; and

(2) whether such representations of management are, in addition, reasonable with respect to transactions and assets in amounts which would be material when measured in relation to the applicant’s financial statements.

(d) Every contractor awarded a contract by the commonwealth or by any political subdivision thereof shall annually file with the deputy commissioner of capital planning and operations during the term of the contract a financial statement prepared by an independent certified public accountant on the basis of an audit by such accountant. The final statement filed shall include the date of final payment. All statements shall be accompanied by an accountant’s report. Such statements shall be made available to the awarding authority upon request. (Amended by 1984, 484, & 38, approved Jan. 7, 1985, effective 90 days thereafter).

Section 7. AUDITOR’S CERTIFICATION

(General Laws, Chapter 44, Section 31C as most recently amended.)

No contract for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building or public work by any city or town costing more than two thousand dollars shall be deemed to have been made until the auditor or accountant or other officer of the city or town having similar duties has certified thereon that an appropriation in the amount of such contract is available therefor and that an officer or agent of the city, town or awarding authority has been authorized to
execute said contract and approve all requisitions and change orders. No order to the contractor for a change in or addition to the work to be performed under a contract subject to this section, whether in the form of a drawing, plan, detail or any other written instruction, unless it is an order which the contractor is willing to perform without any increase in the contract price, shall be deemed to have been given until the auditor or accountant, or other officer of the city or town having similar duties, has certified thereon that an appropriation in the amount of such order is available therefor; but such certificate shall not be construed as an admission by the city or town of its liability to pay for such work. The certificate of the auditor or accountant or other officer of the city or town having similar duties, that an appropriation in the amount of such contract or order is available shall

Section 8. REFERENCE IN EMPLOYMENT, WAGES

(General Laws, Chapter 149 Section 26 as most recently amended by Chapter 296 of the acts of 1967.)

In the employment of mechanics and apprentices, teamsters, chauffeurs and laborers in the construction of public works by the commonwealth, or by a county, town or district, or by persons contracting or subcontracting for such works, preference shall first be given to citizens of the commonwealth who have been residents of the commonwealth for at least six months at the commencement of their employment who are male veterans as defined in clause Forty-third of section seven of chapter four, and who are qualified to perform the work to which the employment relates; and secondly, to citizens of the commonwealth generally who have been residents of the commonwealth for at least six months at the commencement of their employment, and if they cannot be obtained in sufficient numbers, then to citizens of the United States, and every contract for such work shall contain a provision to this effect. Each county, town or district in the construction of public works, or persons contracting or subcontracting for such works, shall give preference to veterans and citizens who are residents of such county, town or district. The rate per hour of the wages paid to said mechanics and apprentices, teamsters, chauffeurs and laborers in the construction of public works shall not be less than the rate or rates of wages to be determined by the commissioner as hereinafter provided; provided, that the wages paid to laborers employed on said works shall not be less than those paid to laborers in the municipal service of the town or towns where said works are being constructed; provided, further, that where the same public work is to be constructed in two or more towns, the wages paid to laborers shall not be less than those paid to laborers in the municipal service of the town paying the highest rate; provided, further, that if, in any of the towns where the works are to be constructed, a wage rate or wage rates have been established in certain trades and occupations by collective
agreements or understandings between organized labor and employers, the rate or rates to be paid on said works shall not be less than the rates so established; provided, further that in towns where no such rate or rates have been so established, the wages paid to mechanics and apprentices, teamster, chauffeurs and laborers on public works, shall not be less than the wages paid to the employees in the same trades and occupations by private employers engaged in the construction industry. This section shall also apply to regular employees of the commonwealth or of a county, town or district, when such employees are employed in the construction, addition to or alteration of public buildings for which special appropriation of more than One Thousand Dollars are provided. Payments by employers to health and welfare plans, pension plans and supplementary unemployment benefit plans under collective bargaining agreements or understandings between organized labor and employers shall be included for the purpose of establishing minimum wage rates as herein provided.

Section 9. HOURS OF WORK

(General Laws, Chapter 149 Section 34 as most recently amended by Chapter 680 of the acts of 1947.)

Every contract, except for the purchase of material or supplies, involving the employment of laborers, workmen, mechanics, foremen or inspectors, to which the commonwealth or any county or town, subject to section thirty, is a party, shall contain a stipulation that no laborer, workman, mechanic, foreman or inspector working within the commonwealth, in the employ of the contractor, subcontractor or other person doing or contracting to do the whole or a part of the work contemplated by the contract, shall be required or permitted to work more than eight hours in any one day or more than forty-eight hours in any one week, or more than six days in any one week, except in case of emergency, or, in case any town subject to section thirty-one is a party to such a contract, more than eight hours in any one day, except as aforesaid, provided, that in contracts entered into by the department of public works for the construction or reconstruction of highways there may be inserted in said stipulation a provision that said department, or any contractor or subcontractor for said department, may employ laborers, workmen, mechanics, foremen and inspectors for more than eight hours in any one day in such construction or reconstruction when, in the opinion of the commissioner of labor and industries, public necessity so requires. Every such contract not containing the aforesaid stipulation shall be null and void.

Section 10. MINIMUM WAGE RATES

In compliance with Massachusetts Laws, Chapter 149, Sections 26 to 27D inclusive, classifications of Labor and Minimum Wage Rates applying thereto have been established by the Department of Labor and Industries of the Commonwealth of Massachusetts and are included in these specifications hereinafter.
Section 11. MDEM NON DISCRIMINATION CONTRACT COMPLIANCE FORM AND SPECIAL PROVISIONS FOR PARTICIPATION BY MINORITY/WOMAN CONTRACTORS.

MDEM Non Discrimination Contract Compliance Form and Special Provisions for participation by Minority/Woman Contractors. Note: Contractor must execute Attachment A Form X - Schedule for Participation by Women and Minority Business Enterprises prior to contract execution.
ATTACHMENT E

MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NON - DISCRIMINATION CONTRACT COMPLIANCE FORM

Whereas, the Department of Environmental Management (DEM) has identified one of its priorities to be non-discrimination in employment and service delivery, in accordance with the State and Federal statutes and executive orders;

Whereas, it is the policy of the Commissioner of DEM to mandate the DEM non-discrimination standards;

The Department of Environmental Management and its Providers agree to the following:

I. The Department of Environmental Management shall:

A. Give direction and technical assistance to Providers in preparing and implementing Equal Opportunity/Affirmative Action (EEO/AA) Policy Statement and/or an EEO/AA Plan

B. Arrange meetings with Providers as required, to discuss non-discrimination practices;

C. Monitor each Provider's compliance with the written EEO/AA Policy Statement and/or EEO/AA Plan filed with DEM;

D. Give Providers access to special DEM recruitment efforts for females, minorities, and the handicapped;

E. Maintain a full time Title VI officer in order to assess and implement the components of an effective DEM Non-Discrimination Contract Compliance Program.

II. All Potential Contractor who submit a request for funding to DEM shall

A. Be familiar with, and comply with all applicable provision of:
   U.S. Department of Health and Human Services regulation implementing Federal statutes that prohibit discrimination on the basis of race, color, national origin, sex, handicap, age, and religion in programs and activities receiving Federal Financial assistance, including, as applicable: 45 CFR Part 80, implementing Title VI of the Civil Rights Act of 1984 (42 USC s. 2000d et seq.); 45 CFR Part 91, implementing the Age Discrimination Act of 1975, as amended (42 USC s. 6101 et seq.); and 45 CFR Part 92, implementing block grant provisions of the Omnibus Budget Reconciliation Act of 1981 (42 USC ss. 300u-7, 300y-9 708, 8625 and 9906), and

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M.G.L. c 151B. s 4(10), which prohibits discrimination in furnishing services on grounds that individual is a recipient of federal, state or local public assistance or housing subsidies.

B. Submit a written EEO/AA Policy Statement to DEM upon request. The policy statement shall at least outline the following:

1. Non-discrimination in employment and service delivery as an organizational priority and practice;

2. Access to employment and service delivery by all otherwise eligible persons regardless of their race, creed, color, sex, national origins, political affiliation, physical or mental handicap;

3. Goal of having staff at all levels of the organization reflect the proportion of minority, female and handicapped consumer represented in the service delivery area;

4. Identification of an individual in the organization who is entrusted with enforcing the non-discrimination policy; and

5. Signature and title of the organization's Chief Executive Officer.

II. D. Conduct specific activities to implement the EEO/AA Policy Statement.

E. Cooperate fully in making relevant employment and service delivery data available to DEM for review.

III. Those Providers having FY'86 contracts with the Commonwealth totaling $50,000 or more shall:

A. Submit to DEM upon request and implement during the term of DEM contract(s) and EEO/AA Plan which outlines the following:

1. EEO/AA Policy Statement as outlined in II.C above.
2. Recruitment/Screening/Selection Procedure.
5. Numerical Affirmative Action goals and goal-setting methodology for minorities and females.
B. Conduct specific recruitment/personnel activities to ensure effectiveness of the EEO/AA Plan.

C. Submit a "Building Accessibility for Handicapped Persons" Checklist for each facility or building in use by the Provider (form attached).

D. Develop and post in each service office a Non-Discrimination in Services Form that make specific reference to Title VI of the Civil Rights Act of 1964 and Sec. 504 of the Rehabilitation Act of 1978.

E. Cooperate fully in making any other relevant employment and service delivery data available to DEM for review.

Agreed:

By: Contractor

Authorized Signature/Date

By: Contractor

Print Name & Title

By: Dept. of Environmental Management

Signature/Date

Name/Title/DEM Representative
(Letterhead of Organization)

EEO/AA POLICY STATEMENT

Name of Organization

has a statutory mandate under law to guarantee

equal treatment for all who seek access to its services or opportunities for employment and advancement. No discrimination will be tolerated on the basis of race, creed, political affiliation, color, sex, national origin, age, or handicap. The ultimate goal is for personnel of this organization to reflect the proportion of minority, female and handicapped persons in the populations they serve.

Name of Organization

will meet its legal, moral, social, and economic responsibilities for Equal Employment Opportunity/Affirmative Action as authorized and required by all pertinent state and federal legislation, executive orders and rules and regulations, including the following:

1. Title VII of the Civil Rights Act of 1964 (42 USC §2000e et seq.), which prohibits discrimination in employment on the basis of race, color, religion, sex, or national origin; and

2. The Age Discrimination in Employment Act of 1967 (29 USC §621 et seq.), which prohibits discrimination in employment on the basis of age with regard to those individuals who are at least 40 years of age, but less than 65 years of age; and

3. Section 504 of the Rehabilitation Act of 1973 (29 USC §794), and the regulations promulgated pursuant thereto (45 CFR Part 84), which prohibits discrimination against qualified handicapped individuals on the basis of handicap and requires employers to make reasonable accommodations to known physical or mental limitations of otherwise qualified handicapped applicants and employees; and

4. M.G.L. c.151B §4 (1), as amended by Chapter 533, 1983, which prohibits discrimination in employment on the basis of race, color, sex, religious creed, national origin, ancestry, age or handicap.

In addition, the Provider agrees to be familiar with and abide by:

- Massachusetts Executive Order 143
- Massachusetts Executive Order 227
POLICY STATEMENT (continued)

- Equal Pay Act of 1963
- Massachusetts Executive Order 74 as amended by Executive Order 116
- Massachusetts Architectural Barriers Board Act
- Federal Executive Orders 11246 and 11375 as amended

All employees, unions, subcontractors, and vendors must make genuine and consistent effort to:

1. ensure equal employment opportunities for present and future employees, and;
2. implement affirmative action, as legally required, to remedy the effects of past employment discrimination and social inequalities.

The responsibility for implementing and monitoring this policy has been delegated to ____________________________________________

Name and Title of Employee

Furthermore, ____________________________________________ prohibits that any employee, or applicant, be subjected to coercion, intimidation, interference, or discrimination for filing a complaint or assisting in an investigation under this program. No portion of this Equal Employment Opportunity/Affirmative Action Policy shall be construed as conflicting with any existing or future judicial or legislative mandate where a construction consistent with that mandate is reasonable.

__________________________________
Date

Signature of Chief Executive Officer

______________________________
Print Name & Title of
Chief Executive Officer

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ATTACHMENT G
CONTRACT LANGUAGE FOR HORIZONTAL CONSTRUCTION
SPECIAL PROVISIONS FOR PARTICIPATION
BY MINORITY / WOMAN CONTRACTORS

I. PERCENTAGE PARTICIPATION

On this contract, percentage goals for business activity to be performed by Minority Business Enterprise(s) shall be not less than the following percentage(s) submitted with the bid, by the contractor in the schedule for participation by the Minority Business Enterprise(s) whichever is greater:

MINORITY CONTRACTOR 10% WOMAN CONTRACTOR 5%

At least one-half of foregoing percentage shall be in the form of work as a contract.

II. DEFINITIONS

For the purpose of this Special Provision, the following terms are defined as follows:

A. Contractor - any business who contracts or subcontracts construction, demolition, renovation, survey, or maintenance work in the various classifications customarily used in highway work and is acting in this capacity under the subject contract.

B. Equipment Rental Firm - a firm that owns equipment and assumes actual and contractual responsibility to rent said equipment to perform a useful function of the work of the contract consistent with normal industry practice.

C. Material Supplier - a vendor engaged in sales to construction industry from an established place of business or source of supply, and that vendor 1) manufactures goods from raw materials or substantially alters them before resale or 2) provides and maintains a storage facility for materials utilized in the work, consistent with normal industry practice.

D. SCMA - State Office of Minority Business Assistance.

E. Minority (M) - a person who is a permanent resident in the United States who is Black, Western Hemisphere Hispanic, Asian, Native American or Cape Verdean.

F. Minority Business Enterprise - any business organization determined by SCMA to be at least 51% owned and controlled by one or more minority persons hereinafter referred to as MBE.

G. In the case of a joint venture between a minority/non-minority controlled enterprise meeting the requirements of (I) above, the joint venture shall be found to be a MBE if the enterprise meeting the requirements of (I) above shall have at least 51% control over management of the project bid upon and shall have the right to receive at least 51% of the profits deriving from that project.

H. Percentage of Total Price - the percentage which the amount to be paid to MBE for the activity they perform represent a part of the total bid price.

I. Prime Contractor - the Party of the second part to the contract, act directly or through an authorized lawful agent or employee.

III. DETERMINATION OF MBE STATUS

A. Any contractor, subcontractor or sub-subcontractor may apply to SCMA for MBE status. Applications must be made on the MBE application form prepared by SCMA. The applicant may request a form either from SCMA or from the Department.
B. SCMA will be responsible for preparing, publishing, and updating a list of certified Minority Owned contracting and subcontracting businesses. Bidders shall rely on the list that is most current at the time the work is advertised and shall use it as a reference source to assist such bidders in meeting the requirements of these conditions.

C. Submission of an application to SCMA does not constitute certification by SCMA.

D. Bidders shall exercise their own judgement in selecting any business enterprise to perform any activity in connection with the contract.

IV. SCHEDULE

A. As part of the proposal the bidder shall submit a schedule on form X attached and shall list those MSE's with whom the contractor intends to make a commitment, the total price to be paid each MSE, and the nature of the activity to be performed by each MSE.

B. Within seven (7) days after the bids are opened the three lowest bidders shall submit completed and signed letters of intent from each of the MSE's listed in its schedule. The letter of intent shall be on form Y attached and include, among other things, the contract activity the MSE is proposing to perform and the prices the MSE proposes to charge for the work. The total amount of each letter of intent shall be at least that listed for the MSE in the schedule.

C. As part of the letter of intent, the SOMWBA certified MSE or WBE shall submit a copy of the certification to the Department. No enterprises with pending applications for certification will be considered in fulfilling the W/HBE participation requirement.

D. The Department may request any bidder to submit within seven days letters of intent for MSE's named in the schedule.

V. COMPLIANCE

A. The Department reserves the right to waive minor defects, as determined by the Department, in documents or time limits required under Section IV. No substitutions for submissions made under Section IV. Schedule shall be made without the prior written approval of the Department and notification to SOMWBA.

B. If the Commissioner finds that the percentage of MSE participation submitted by the bidder on its schedule does not meet the percentage requirements in Section I, it shall reject the bidder's proposal and find such bidder not to be eligible for award of the contract.

C. Subsection 5.01 of the Standard Specifications (Subletting or Assignment of Contract) is incorporated by reference into this Special Provision. Standard Department procedures on written approval of subcontractors will continue to apply. The Department retains the right to approve or disapprove all subcontractors.

D. The Prime Contractor shall not perform with his own organization or assign to any other business any activity designated for the name MSE on the schedule submitted by the Prime Contractor under Section IV without the approval of the Department in accordance with Subsection V-H and V-I.
E. A Prime Contractor's compliance with the percentage requirements in Section I shall continue to be determined by reference to the required percentages of the total bid price as stated in Section I, even though the total of actual contract payments may be greater or less than the bid price.

F. A Prime Contractor who has complied with his schedule, except for approved under-runs, deletions, or other changes affecting performance of the items of work listed in the schedule, shall be considered to have met his obligations under this Special Provision.

G. Any change or substitution of the officers or stockholders in the MBE organization that reduces the minority ownership or control to less than the requisite percentage will immediately rescind the MBE designation. Compliance with this Special Provision obligation will be considered terminated immediately upon notification that the MBE designation has been rescinded and the Prime Contractor shall proceed in accordance with Sections V-H and V-I.

H. The Prime Contractor shall notify the Department of any facts which come to his attention indicating that he will be unable to comply with Section I. (Percentage Participation)

I. If the Prime Contractor desires to comply with Section I, but for reasons beyond his control cannot do so in accordance with the schedule submitted by the Prime Contractor under Section IV, he may submit to the Department the reasons for his inability to comply with his schedule and his proposed revision to the schedule stating how he intends to meet his obligations under Section I. If approved by the Department, such revised schedule shall govern the Prime Contractor's performance in meeting his obligations under this Special Provision.

VI. SANCTIONS

A. If the Prime Contractor does not comply with the terms of this Special Provision, the Department may 1) suspend any payment for the activity that should have been performed by MBE pursuant to the schedule or 2) require specific performance of the Prime Contractor's obligation under Section I by requiring the Prime Contractor to subcontract with MBE for any contracts of Specialty item at the Contract price established for that item in the proposal submitted by the Prime Contractor.

B. To the extent that the Prime Contractor has not complied with the terms of this Special Provision, the Department may retain in connection with final acceptance and final payment, an amount determined by multiplying the bid price of this contract by the percentage in Section I, less the amount paid to MBE's for work performed under the contract and any payments already suspended under VI-A.

C. In addition, or as an alternative, to the remedies under VI-A and B, the Department may suspend, terminate, or cancel this contract, in whole or in part, or may call upon the Prime Contractor's surety to perform all terms and conditions in the contract, unless the Prime Contractor is able to demonstrate his compliance with the terms of the right to participate in any future contracts awarded by the Department for a period of up to three years.

D. In any proceeding involving the imposition of sanctions by the Department, no sanctions shall be imposed if the Department finds that the Prime Contractor has taken every possible measure to comply with the Special Provision in whole or in part.
E. Any bidder or contractor shall provide such information as is necessary in the judgment of the Department to ascertain its compliance with the terms of this Special Provision.

VII. HEARINGS AND APPEALS

A. No sanctions under Section 72 shall be imposed by the Department except in an adjudicatory proceeding under Chapter 30A of the General Laws.

B. A Prime Contractor shall have the right to request suspension of any sanctions imposed under Section 71 upon a showing that he is in compliance with this Special Provision.

VIII. ADDITIONAL INFORMATION

A. All definitions and/or requirements cited herein for MBE's shall also pertain to WBE's except the percentage participation which is stated.

B. Wherever, State Office of Minority and Women Business Assistance or SOMBA appears it shall mean the state Office of Minority and Women Business Assistance or SOMWBA.

C. Award of Contracts will only be made to bidders who have identified SOMBA (SOMWBA) certified MBE and WBE Contractors to be used on this project.

D. The Department does not certify W/MBE's and only recognizes SOMBA certified W/MBE's in fulfilling these requirements for W/MBE participation.
In accordance with Chapter 424 of the Acts of 1976, you are invited to apply for certification to participate in the Massachusetts Small Business Purchasing Program. Please refer to the regulations for this program for definitions and procedures, and answer all applicable questions as completely as possible.

1. Name of Business: ________________________________

   Address: ________________________________________

   City: ___________ State: ___________ Zip: ___________

   Business Telephone: (___) __________________________

2. Address to which Bidding Forms are to be mailed: (If different than above)

   __________________________________________________

3. Contact person for the Small Business Purchasing Program:

   Name: ___________________ Title: ___________________

4. The principal owner or operator of this business is:

   Name: ___________________ Title: ___________________

   Male ___ Female ___

5. Is your company at least 51% owned, controlled, or actively managed by minority persons(s): Yes ___ No ___

   This information is requested because minority-owned and/or women-owned business enterprises are eligible for certain federal and/or state programs.

6. Type of Ownership: ___ Individual ___ Partnership ___ Corporation

   Joint Venture ___ Other ___ If incorporated, indicate in which state: ________

7. Is your business independently owned and operated: ___ Yes ___ No
3) Is your principal place of business in Massachusetts:  
   Yes    No

9) VENDOR IDENTIFICATION NUMBER: Check block A, B, or C and follow  
   applicable instructions:

   A. If you already have a vendor number registered with the Commonwealth,  
      enter all 15 digits in the blocks below.

   B. If not a Commonwealth-registered vendor, and your business employs  
      2 or more people, enter your Federal Employer Identification (FEI)  
      Number in blocks 1-9:

   C. If an individual without one of the above (A or B), enter your Social  
      Security Number in blocks 1-9:

         1  2  3  4  5  6  7  8  9  10  11  12  13

10) Nature of Business:  
    - Manufacturer  
    - Service  
    - Wholesale  
    - Retail  
    - Transportation, Communication, Electric, Gas, or Sanitary Services  
    - Other

11) Number of Employees: ____________________________

12) Gross Receipts:

<table>
<thead>
<tr>
<th></th>
<th>MostRecent Fiscal Year</th>
<th>2nd Most Recent Fiscal Year</th>
<th>3rd Most Recent Fiscal Year</th>
<th>Combined Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>

13) Indicate services, products, supplies and materials, class of equipment in  
    which you desire to bid (attach a list if necessary):

   ____________________________
   ____________________________
   ____________________________

I hereby certify that the information stated herein is true and accurate concerning the eligibility of my business for participation  
in the Massachusetts Small Business Purchasing Program.

I further certify that neither the applicant nor any person or concern having any connection with the applicant as a principal or  
officer, so far as is known, is now barred or otherwise declared ineligible by any agency of the state government from bidding,  
for furnishing materials, supplies or services to the state or any agency thereof.

Printed Name and Title ____________________________

Signature ____________________________ Date ____________________________

Reviewed By ____________________________ Title ____________________________

Approved ___ Disapproved Reason ____________________________
## Schedule for Participation by Women and Minority Business Enterprises

**NOTE:** Participation of a woman-owned or minority-owned enterprise may be counted in only one category. The same participation cannot be used in computing the percentage of minority and again of women participation.

### ITEM I - Minority Business Enterprise Participation in the work

<table>
<thead>
<tr>
<th>Name &amp; Address of MBE</th>
<th>Nature of Participation</th>
<th>Dollar Value of Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Total MBE Commitment:

**Percentage of MBE Participation (Total Commitment) =**

**Percentage of MBE Participation (Total Bid Price) =**

### ITEM II - Women Business Enterprise Participation in the work

<table>
<thead>
<tr>
<th>Name &amp; Address of WBE</th>
<th>Nature of Participation</th>
<th>Dollar Value of Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

Total WBE Commitment:

**Percentage of WBE Participation (Total Commitment) =**

**Percentage of WBE Participation (Total Bid Price) =**

The bidder agrees to furnish implementation reports as required by the Department to indicate the WBE(s) which it has used or intends to use. Breach of this commitment constitutes a breach of this contract.

Name of Bidder:

Date: _____________________  By: _____________________

**NOTE:** THIS FORM MUST BE COMPLETED BY THE BIDDER AND SUBMITTED PRIOR TO CONTRACT EXECUTION. THE PERCENTAGES SHOWN FOR THE MBE & WBE PARTICIPATION MUST MEET THE GOALS SET FORTH IN ATTACHMENT G.
LETTER OF INTENT
SOMWBA CERTIFIED ENTERPRISE

(TO BE SUBMITTED BY THE BIDDER AFTER BEING COMPLETED BY EACH SCE, AS REQUIRED UNDER SECTION IV OF ATTACHMENT G.
THIS FORM DOES NOT HAVE TO BE SUBMITTED WITH THE BID.)

RE: PROJECT NO. __________________ LOCATION __________________

TO: ____________________________
   (Name of Bidder)

FROM: ___________________________
       (Name of SCE or SCC)
       (Address)

1. My company intends to perform work in connection with the above-captioned project as
   _____ an individual  _____ a corporation  _____ a partnership
   _____ a joint venture with ______________________________
   _____ other (explain) ________________________________

2. My company has been certified by SOMWBA as a ___________ ("MBE" or "WBE")
   and has not changed its ownership, control, or management in any way to
   affect certification.

3. My company understands that if your company is awarded the contract, your
   company intends to enter into an agreement to perform the work described
   below for the price indicated.

4. My company intends to __________________________
   (Brief description of work)
   __________________________
   __________________________
   __________________________
   __________________________
   __________________________
   for a total amount of _____________ ($______)

   __________________________
   (Authorized signer for SCE)
   __________________________
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

PARTICIPATION BY MINORITY BUSINESS ENTERPRISES

FORM Y

LETTER OF INTENT

(CONSTRUCTION-TYPE CONTRACTS)

PROJECT NUMBER

PROJECT LOCATION

<table>
<thead>
<tr>
<th>Item Number (if Applicable)</th>
<th>Description of Activity with notation such as &quot;Labor Only&quot;, &quot;Material Only&quot;, &quot;Complete&quot;</th>
<th>Quantity</th>
<th>Unit</th>
<th>Amount</th>
</tr>
</thead>
</table>

TOTAL AMOUNT $__________________________

(Signature of Minority Business Enterprise)

TITLE:

G-28
ATTACHMENT B
FORM Y

LETTER OF INTENT

SOMWBA CERTIFIED ENTERPRISE

(TO BE SUBMITTED BY THE BIDDER AFTER BEING COMPLETED BY EACH SCE, AS REQUIRED UNDER SECTION IV OF ATTACHMENT G. THIS FORM DOES NOT HAVE TO BE SUBMITTED WITH THE BID.)

RE: PROJECT NO. LOCATION

TO: ______________________
  (name of bidder)

FROM: _____________________
  (name at SCE or ECE)
  (address)

1. My company intends to perform work in connection with the above-mentioned project as:
   ■ an individual
   ■ a corporation
   ■ a joint venture with one or more other (explain)

2. My company has been certified by SOMWBA as a ___________ ("HBE" or "SBE")
   and has not changed its ownership, control, or management in any way to affect certification.

3. My company understands that if your company is awarded the contract, your company intends to enter into an agreement to perform the work described below for the price indicated.

4. My company intends to
   ________________________________
   (brief description of work)

   ________________________________
   ________________________________
   ________________________________

   for a total amount of ________________________
   ($ ________________________)

   _____________________________
   (date)

   _____________________________
   (authorized signature for SCE)
### LETTER OF INTENT

(_CONSTRUCTION-TYPE CONTRACT_)

<table>
<thead>
<tr>
<th>Item Number (If Applicable)</th>
<th>Description of Activity with notation such as &quot;Labor Only&quot;, &quot;Material Only&quot;, &quot;Complete&quot;</th>
<th>Quantity</th>
<th>Unit</th>
<th>Price</th>
<th>Amount</th>
</tr>
</thead>
</table>

**TOTAL AMOUNT:** $__________

**DATE:** __________

**SIGNATURE:**

**TITLE:**

---

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

PARTICIPATION BY WOMEN: BUSINESS ENTERPRISES

FORM Y
II. During the performance of this Contract, the Contractor and all of his Subcontractors (hereinafter collectively referred to as the Contractor), for himself, his assignees and successors in interest, agree as follows:

1. In connection with the performance of work under this contract, the Contractor shall not discriminate against any employee or applicant for employment because of race, color, religious creed, national origin, age or sex. The aforesaid provision shall include, but not be limited to, the following: employment upgrading, demotion, or transfer; recruitment advertising; recruitment layoff; termination; rates of pay or other forms of compensation; conditions or privileges of employment; and selection for apprenticeship. The Contractor shall post hereafter in conspicuous places, available for employees and applicants for employment, notices to be provided by the Commission setting forth the provisions of the Fair Employment Practices Law of the Commonwealth (M.G.L. Chapter 151A).

2. In connection with the performance of work under this contract, the Contractor shall undertake in good faith affirmative action measures designed to eliminate any discriminatory barriers in the terms and conditions of employment on the grounds of race, color, religious creed, national origin, age or sex, and to eliminate and remedy any effects of such discrimination in the past. Such affirmative action shall entail positive and aggressive measures to ensure equal opportunity in all aspects of hiring, upgrading, promotion or transfer; recruitment, layoff or termination; rates of compensation and in-service or apprenticeship training programs. This affirmative action shall include all action required to guarantee equal employment opportunity for all persons, regardless of race, color, religious creed, national origin, age or sex. A purpose of this provision is to ensure to the fullest extent possible an adequate supply of skilled tradesmen for this and future Commonwealth public construction projects.

III. 1. As part of his obligation of remedial action under the foregoing section, the Contractor shall maintain on this project not less than the percent ratio of minority employees' man hours to total man hours in each job category including but not limited to bricklayers, carpenters, cement masons, electricians, ironworkers, operating engineers, and other classes of work enumerated in Section 44C of Chapter 149 of the Massachusetts General Laws. The percentage ratio for this project is found on Page 1 of the Special Provisions.

2. In the hiring of minority journeymen, apprentices, trainees and advanced trainees, the Contractor shall rely on referrals from a multi-employer affirmative action program approved by the Commission, traditional referral methods utilized by the construction industry, and referrals from agencies, not more than three in number at any one time, designated by the Liaison Committee or the Commission.

IV. 1. At the discretion of the Contractor there may be established for the life of the contract a body to be known as the Liaison Committee. The Liaison Committee shall be composed of one representative each from the agency or agencies administering this project, hereinafter called the administering agency, the Commission and such other representatives as may be designated by the Commission in consultation with the administrative agency.

2. The Contractor (or his agent, if any, designated by him as the on-site equal employment opportunity officer) shall recognize the Liaison Committee as an affirmative action body and shall establish a continuing working relationship with the Liaison Committee, consulting with the Liaison Committee on all matters related to minority recruitment, referral, employment and training.

3. The Contractor shall prepare projected manning tables on a quarterly basis. These shall be broken down into projections, by week, or workers required in each trade. Copies shall be furnished one week in advance of the commencement of the period covered, and also when updated, to the Commission and Liaison Committee.

4. Records of employment referral orders, prepared by the Contractor, shall be made available to the Commission and to the Liaison Committee upon request.

5. The Contractor shall prepare weekly reports in a form approved by the Commission of Hours worked in each trade by each employee, identified as minority or non-minority. Copies of these shall be provided at the end of each such week to the Commission and to the Liaison Committee.

V. If the Contractor shall use any subcontractor and any work performed under this contract, he shall take affirmative action to negotiate with qualified minority subcontractors. This affirmative action shall include, but not be limited to, notifying the Office of Minority Business Assistance (within the Executive Office of Communities and Development) or its designee, while bids are in preparation, of all prospective work which the Contractor intends to negotiate to qualified minority firms.

VI. In the employment of journeymen, apprentices, trainees and advanced trainees, the Contractor shall give preference, first, to citizens of the Commonwealth who have served in the Armed Forces of the United States in time of war and have been discharged therefrom or released from active duty therein, and who are qualified to perform the work to which the employment relates, and, secondly, to citizens of the Commonwealth generally, and, if such cannot be obtained in sufficient numbers, then to citizens of the United States.
VII. A designee of the Commission and a designee of the Liaison Committee shall each have right of access to the construction site.

VIII. Compliance with Requirements

The Contractor shall comply with the provisions of Executive Order No. 74, as amended by Executive Order No. 115 dated May 1, 1975, and of Chapter 151B as amended, of the
Massachusetts General Laws, both of which are herein incorporated by reference and made a part of this contract.

IX. Non-Discrimination

The Contractor, in the performance of all work after award, and prior to completion of the contract work, will not discriminate on grounds of race, color, religious creed, national origin, age or sex in employment practices, in the selection or retention of subcontractors, or in the procurement of materials and rentals of equipment.

X. Solicitations for Sub-Contracts, and for the Procurement of Materials and Equipment

In all solicitations either by competitive bidding or negotiation made by the Contractor either for work to be performed under a subcontract or for the procurement of materials or equipment, each potential subcontractor or supplier shall be notified in writing by the Contractor of the Contractor's obligations under this contract relative to non-discriminatory and affirmative action.

XI. Compliance Information, Reports and Sanctions

1. The Contractor will provide all information and reports required by the administering agency or the Commission on instructions issued by either of them and will permit access to its facilities and any books, records, accounts and other sources of information which may be determined by the Commission to affect the employment of personnel. The contractor shall not refuse to submit any report or information to the Commission, if the contractor is requested to do so as appropriate to attain full and effective enforcement.

2. Whenever the administering agency, the Commission, or the Liaison Committee believes the General Contractor or any Subcontractor may not be operating in compliance with the terms of this Section, the Commission directly, or through its designated agent, shall conduct an appropriate investigation, and may confer with the parties, to determine if such Contractor is operating in compliance with the terms of this Section. If the Commission or its agent finds the General Contractor or any subcontractor not in compliance, the contractor shall make a preliminary report on non-compliance, and notify such contractor in writing of such steps, as will in the judgment of the Commission or its agent bring such Contractor into compliance. In the event that such Contractor shall not or refuses to fully perform such steps, the Commission shall make a final report of non-compliance, and recommend to the administering agency the imposition of one or more of the sanctions listed below. If, however, the Commission believes the General Contractor or any Subcontractor has taken or is taking every possible measure to achieve compliance, it shall not make a final report of non-compliance. Within fourteen days of the receipt of the recommendations of the Commission, the administering agency shall move to impose one or more of the following sanctions, as it may deem appropriate to attain full and effective enforcement:

a. The recovery by the administering agency from the General Contractor of $100 of the contract award price or $1,000 whichever sum is greater, in the nature of liquidated damages or, if a Subcontractor is in non-compliance, the recovery by the administering agency from the General Contractor, to be assessed for the contract or a back charge against the Subcontractor, of $100 of the subcontractor price, or $400 whichever sum is greater, in the nature of liquidated damages, for each week that such party fails or refuses to comply;

b. The suspension of any payment or part thereof due under the contract until such time as the General Contractor or any Subcontractor is able to demonstrate his compliance with the terms of the contract;

c. The termination, or cancellation, of the contract, in whole or in part, unless the General Contractor or any Subcontractor is able to demonstrate within a specified time his compliance with the terms of the contract;

d. The denial to the General Contractor or any Subcontractor of the right to participate in any future contracts awarded by the administering agency for a period of up to three years.

3. If at any time after the imposition of one or more of the above sanctions a Contractor is able to demonstrate that he is in compliance with this Section, he may request the administering agency, in consultation with the Commission, to suspend the sanction conditionally, pending a final determination by the Commission as to whether the Contractor is in compliance. Upon final determination of the Commission, the administering agency, based on the recommendation of the Commission, shall either lift the sanction or continue it.

4. Sanctions enumerated under Sections XI-1 shall not be imposed by the administering agency except after an administrative proceeding, as that term is used in G.L. c. 30A, §15. Nor shall an investigation or its agent or its agent be initiated without prior notice to the Contractor.

XII. Severability

The provisions of this section are severable, and if any of these provisions shall be held unconstitutional by any court of competent jurisdiction, the decision of such court shall not affect or impair any of the remaining provisions.
XIII. A. BIDDERS' REQUIREMENTS

The bidder will comply with the minority manpower ratio and specific affirmative action steps contained herein; and obtain from each of its subcontractors and submit to the contracting or administering agency prior to the award of any subcontract under this contract the subcontractor certification required by these bid conditions.

1. Subcontractors' Certification Prior to the award of any subcontract under this Invitation for Bids, regardless of tier, the prospective subcontractor must execute and submit to the Prime Contractor the following certification, which will be deemed a part of the resulting subcontract:

   **SUBCONTRACTORS' CERTIFICATION**

   (Subcontractor)

   1. it tends to use the following listed construction trades in the work under the subcontract:

   2. will comply with the minority manpower ratio and specific affirmative action steps contained herein;

   (Signature of authorized representative of Subcontractor)

   In order to ensure that the said subcontractors' certification becomes a part of all subcontracts under the prime contract, no subcontract shall be executed until an authorized representative of the MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS has determined, in writing, that the said certification has been incorporated in such subcontract, regardless of tier. Any subcontract executed without such written approval shall be void.

2. Materiality The requirements made of the bidder pursuant to these bid conditions are material, and will govern the bidders performance on the project and will be made a part of his bid.

   **MINIMUM MINORITY PERCENTAGES TO BE APPLIED TO STATE AND STATE ASSISTED CONTRACTS WITHIN THE COMMONWEALTH OF MASSACHUSETTS**

   The following percentages shall apply:

<table>
<thead>
<tr>
<th>Location</th>
<th>Not Less Than</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boston: Impact Area (Jamaica Plain (part))</td>
<td>30%</td>
</tr>
<tr>
<td>Mattapan, South Cove, Chinatown, Bay Village, Roxbury, Dorchester, South End</td>
<td>12%</td>
</tr>
<tr>
<td>Others</td>
<td>10%</td>
</tr>
<tr>
<td>Cambridge</td>
<td>12%</td>
</tr>
<tr>
<td>New Bedford</td>
<td>18%</td>
</tr>
<tr>
<td>Springfield</td>
<td>10%</td>
</tr>
<tr>
<td>All other cities and towns</td>
<td>5%</td>
</tr>
</tbody>
</table>
H. SECTION 1A, GENERAL REQUIREMENTS

1-1 Application
1-2 Specifications and Drawings
1-3 Progress of Work
1-4 Order of Construction
1-5 Visit to Site
1-6 Technical Specifications
1-7 Detours and Traffic Interference
1-8 Bypassing of Stormwater and Stream Flow
1-9 Roadway Maintenance
SECTION 1A
GENERAL REQUIREMENTS

GENERAL

1-1. APPLICATION. The Supplemental General Requirements under these specifications are applicable to all work contemplated under this contract.

1-2. SPECIFICATIONS AND DRAWINGS. All work shall conform to these specifications and the accompanying drawings entitled:

WALKER POND
DREDGING PLAN
STURBRIDGE, MASSACHUSETTS

dated consisting of sheets made by EEC, Inc., 296 North Main Street, East Longmeadow, Massachusetts, on file with the Owner, and any changes, drawings, plans, and directions that may be furnished from time to time by the Engineer.

1-3. PROGRESS OF WORK. The Contractor shall promptly start and continue actual construction work under this contract with the necessary equipment to properly execute and complete this contract in the specified time. No cessation of Contractor's operations will be allowed without the approval of the Engineer. The rate of progress shall be satisfactory to the Owner and the Engineer. The Contractor shall furnish to the Engineer a progress schedule for the work.

1-4. ORDER OF CONSTRUCTION. The order of construction shall be as directed by the Engineer. The Engineer reserves the right to schedule the Contractor to construct at any locations within the project area. At the same time the Engineer may schedule the suspension of construction at any location or locations.

1-5. VISIT TO THE SITE. Before submitting a bid, the Contractor shall visit the site, examine the existing conditions and thoroughly acquaint himself with the conditions for performing the work. He shall also study the drawings and compare the same with the information gathered during his examination of the sites, as no extra compensation will be authorized for extra work caused by his unfamiliarity with the sites and/or drawings or the conditions peculiar to this job.
1-6. TECHNICAL SPECIFICATIONS. All technical specifications such as AWWA, ASTM, AASHTO, MDPWSSHB, etc., referred to in these specifications refer to the latest revision of such technical specifications.

1-7. DETOURS AND TRAFFIC INTERFERENCE. The Contractor shall contact the Superintendent of Wells State Park, Sturbridge, in order to obtain the necessary permission and determine the requirements of said authority with respect to traffic control, etc. The Contractor's attention is directed to the fact that the work on this Project may be performed on streets and in areas which are utilized by pedestrians as well as by vehicles. The Contractor shall be responsible for the installation of adequate precautions and other safety measures and controls deemed necessary by the Engineer for his own personnel. Trenches shall not be opened in traveled ways until all materials and equipment required for the work are at the site and available for immediate use. When work is not in progress, trenches in areas subject to public travel shall be covered. The work at each trench shall be such that the placing of pipe, or structure, backfilling and patching of the surface closely follows each preceding operation.

1-8. BYPASSING OF STORMWATER AND STREAM FLOW. Special consideration must be given to prevent siltation in any adjacent wetlands and water bodies. Any pumping or temporary piping necessary to maintain flows at the site shall be included in the bid prices. During the performance of all work under this contract, the Contractor shall adopt such precautions in the conduct of his operations as may be necessary to avoid contaminating water in the brooks and river. All earthwork, grading, moving of equipment, water control and other operations likely to create silting, shall be so planned and conducted as to minimize pollution in all waterbodies. Water used for any purpose whatsoever by the Contractor, which has become contaminated with soil, bitumen, salt, concrete or other pollutants shall not be discharged into any waterbody. Under no circumstance shall the contractor discharge pollutants into any waterbody. Refueling of dredge to conform with Local, State and Federal guidelines and policies.

1-9. ROADWAY MAINTENANCE. Contractor will repair at no additional cost any and all damage to the existing roadway system caused by construction vehicles during the prosecution of this contract. Contractor will clean roadway of materials dropped or spilled as a result of materials handling or hauling.
I. SECTION 1B, TEMPORARY FACILITIES

1-1 Applicability
1-2 Protection of Property
1-3 Barricades
1-4 Bracing, Shoring and Sheeting
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SECTION 1B
TEMPORARY FACILITIES

GENERAL

1-1. APPLICABILITY. The requirements made under this Section B are applicable to all work contemplated under this contract.

1-2. PROTECTION OF PROPERTY. The Contractor shall protect existing buildings and grounds, public streets and existing utilities. If damage is done to these areas, the Contractor shall make all repairs necessary to restore such areas to their original condition.

1-3. BARRICADES. Barricades, signs, fences and similar safety and warning devices shall be provided both day and night as required in order to insure the protection of the public as well as employees and others concerned with their duties and presence on the premises at the project site, particularly within the Lake during the dredge season.

1-4. BRACING, SHORING AND SHEETING. The Contractor shall provide all bracing, shoring and sheeting as required for safety and for the proper execution of work. Unless otherwise ordered by the Engineer, all bracing, shoring and sheeting shall be removed when work is completed.

1-5. GUARD LIGHTS. The Contractor shall provide and maintain guard lights at all barricades, obstructions in roads and sidewalks and all trenches and pits adjacent to roads.

1-6. WEATHER PROTECTION. The Contractor shall at all times provide protection against rain, wind, storm, frost or heat so as to maintain all work, materials, apparatus and fixtures free from injury or damage. At the end of the day's work, all new work likely to be damaged shall be covered.

1-7. TEMPORARY BUILDINGS AND CONSTRUCTION

1-7-1. The Contractor shall furnish for himself, such temporary office, storage and fabrication facilities as he may require for his own uses and shall obtain all necessary applicable permits and/or approvals required for their use.

1-7-2. The Contractor shall furnish for himself, such fabrication for docking as he may require for his use during the dredging operation and shall obtain all necessary approvals from the Town and Walker Pond Association prior to construction.
1-8. SANITARY CONVENIENCES. Unless waived by the Owner, necessary sanitary conveniences for the use of workmen on the work, properly secluded from public observation, shall be constructed and maintained by the Contractor in such a manner and at such points as shall be approved by the Owner, and their use shall be strictly enforced. Sanitary conveniences shall be cleaned twice weekly.

1-9. WATER. The Contractor with the approval of the Owner, shall make connections to the nearest public water body and use this supply for construction purposes. All extensions required shall be furnished by the Contractor. Drinking water, satisfactorily cooled, shall also be provided by the Contractor at each work site.

1-10. ELECTRICITY. The Contractor shall arrange for and furnish and maintain all electricity for proper pumping, lighting, the use of power tools up to the time of final acceptance.

1-11. REMOVAL OF WATER AND PROTECTION FROM FLOODING. The Contractor shall provide and maintain all pumps, piping, drains, well points, or any other facility for the control and collection of ground water or surface water. The dewatering operations shall be such that all excavations may be kept at all times free from water so that all construction work may be performed in the dry. The pumping and dewatering operations shall be carried out in such a manner that no loss of ground or disturbance to the bearing soil will result from these operations. Precautions shall be taken to protect new and existing work from flooding during storms and other causes. Pumping shall be continuous where required to protect the work and to maintain satisfactory progress. All pipelines and structures not stable against uplift during construction or prior to completion shall be thoroughly braced or otherwise protected. Discharge water shall be piped to an area approved by the Engineer. The Contractor shall be responsible for maintenance of flow in all water courses, water pipes, drains and other pipes in the flow way of the proposed work or for any conveyance of the flow to a suitable point of discharge in such a manner that there will be no flow upon or hindrance to other work or cause a nuisance of any kind.

1-12. SHELTER AND PROTECTION OF MATERIALS. The Contractor shall be responsible for providing adequate storage facilities for all materials required for the work. The facilities shall be enclosed, heated and provided with moisture control, as required, to provide adequate protection and shall be satisfactory to the Engineer.
1-13. ACCESS TO WORK SITE. The Contractor shall construct at his own expense such temporary access roads as may be necessary for his equipment, men and materials to reach the sites of the work and to carry out the terms of the contract. Upon completion of the work, all temporary access roads unless otherwise specified shall be removed and the areas graded, seeded and mulched and otherwise restored to their original condition satisfactory to the Engineer. Particular attention shall be paid to prevention of erosion and siltation to any waterbodies caused by wheel tracks and ruts.
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SECTION 1C
SUPPLEMENTARY GENERAL CONDITIONS RELATING TO CONTRACT PERFORMANCE

1-1. REFERENCE TO PRINTED FORM OF CONTRACT. Attention is directed to the printed form of the contract of the Town of Sturbridge (Owner) of which these specifications are hereby made a part.

1-2. INSPECTION OF SITE.

1-2-1. Prior to the submission of bids, each bidder shall make a thorough examination of each and every location where work is to be performed. Failure to visit the site will in no way relieve the successful bidder from his responsibility to complete all work in accordance with drawings and specifications without additional cost to the Owner.

1-3. PRE-BIDDING CONFERENCE.

1-3-1. A non-mandatory pre-bidding conference for prospective bidders will be held at 10:00 a.m. local time on

1-3-2. The location of the meeting for all interested parties will be at Wells State Park, Sturbridge.

1-3-3. At the conference the project will be discussed in general. It is desirable that all prospective bidders attend. The contract, specifications, drawings and any other aspects of this project will be explained in response to questions by those attending. For interpretations of questions requiring legal, administrative, or engineering decisions, prospective bidders shall comply with Paragraph 1-4.

1-4. QUESTIONS DURING BIDDING PERIOD.

1-4-1. Questions by prospective bidders as to the interpretation of the Notice to Contractors, form of proposal, form of contract, plans, specifications or form of performance bond and labor and materials or payment bond must be submitted in writing to the Owner and must be in its possession at least ten days before the date herein set for the receipt of general bids. Said Owner will then mail, by Certified Mail with Return Receipt Requested, to bidders who have taken out plans at the addresses given by them, not less than five days before said date, interpretations of all questions so raised which in its opinion require interpretation. Oral interpretations given to prospective bidders will have no standing.

1-4-2. Written inquiries shall be submitted in duplicate and addressed to the Board of Selectmen, Sturbridge, Massachusetts.
1-5. BIDDING DRAWINGS

1-5-1. Proposal shall be based upon the bidding drawings included with the specifications as issued to all bidders, which drawings may be modified by addenda issued by the Owner during the bidding period, and later will, as modified by the addenda, become the contract drawings.

1-5-2. Wherever existing conditions or construction not required as part of the work of the contract are shown on the drawings, they are so shown as a source of information to the Bidder. The Owner, believing such information to be substantially correct assumes no responsibility therefor.

1-6. CONSTRUCTION DRAWINGS

1-6-1. The drawings are made to scale, and unless otherwise noted, all working dimensions shall be taken from the figured dimensions or by actual measurements at the job, but in no case by scaling. The Contractor shall study and compare all drawings and verify all figures before laying out or constructing the work and shall be responsible for any and all errors in his work which might have been avoided thereby. Whether or not an error is believed to exist, deviations from the drawings and the dimensions given thereon shall be made only after all measurements of existing established conditions notwithstanding the figured dimensions on the drawings. When figured dimensions are not in agreement with the Contractor's measurements, he shall immediately notify the Engineer.

1-6-2. If the Contractor during the progress of the work discovers any discrepancies between the drawings and the specifications, errors or omissions on the drawings or any discrepancies between the physical condition of the work and the drawings, he shall immediately notify the Engineer, who shall promptly adjust the same. Resolution of discrepancies between drawings and specifications shall be made solely by the Engineer. Contractor shall prepare bid based upon the more stringent condition and agrees not to seek additional compensation due to Engineer's resolution of the discrepancy.

1-6-3. Any work performed after the discovery of discrepancies without written approval of the Owner shall be at the Contractor's risk and expense.

1-6-4. The Contractor shall have made himself familiar with all conditions affecting the nature and manner of performing the work and shall not be entitled to any extra compensation for any work or expense arising from or caused by his neglect to have verified all existing conditions and requirements.
1-6-5. Where equipment and lines of piping are shown diagrammatically, the Contractor shall be responsible for the coordination and orderly arrangement of the various lines of exposed or embedded piping and conduit included in the work of his contract. He shall coordinate the work of the several subcontractors and prevent all interferences between the equipment, lines of piping, or structural and architectural features, and avoid any unsightly arrangements in exposed work.

1-6-6. The Owner will furnish to the Contractor six sets free of charge of the drawings as issued or released for construction and for each subsequent construction revision. The Contractor shall bear the cost of reproduction of any additional copies which he may require.

1-7. RECORD DRAWINGS. The Contractor shall keep at the site a record set of prints on which he shall clearly and accurately record all approved changes and/or additions to the contract work made to meet field conditions. The set of drawings shall be used for this purpose only, and shall be delivered to the Owner in good condition at the completion of the work before the final payment shall be due and payable, as an accurate record of the work executed.

1-8. SHOP DRAWINGS.

1-8-1. The provisions of these paragraphs supplement the printed form of contract.

1-8-2. The Contractor shall submit four copies of all shop or setting drawings, schedules and catalog cuts to the Engineer for review. All data submitted to the Engineer shall be prechecked and verified by the Contractor.

1-8-3. The Contractor will also submit to the Engineer for review, with such promptness as to cause no delay in the work all samples required by the contract. All samples will have been checked and approved by the Contractor, identified clearly as to material, manufacturer, any pertinent catalog numbers and the use for which intended.

1-8-4. At the time of each submission, the Contractor will call to the Engineer's attention, in writing, any deviations that the shop drawings or samples may have from the requirements of the contract.

1-8-5. The Engineer will check with reasonable promptness shop drawings and samples, but his checking shall be only for conformance with the design concept of the project and for compliance with the information given in the contract. The Contractor will make any corrections required by the Engineer and return six copies of corrected shop drawings or resubmit new samples. The checking of a separate item as such will not indicate acceptance of the assembly in which the item functions.
1-8-6. No work requiring a shop drawing or sample submission shall be proceeded with until the submission has been reviewed by the Engineer.

1-8-7. The Engineer's review of shop drawings or samples shall not relieve the Contractor from his responsibility for any deviations from the requirements of the contract unless the Contractor has in writing called the Engineer's attention to such deviations at the time of submission and the Engineer has given written acceptance to the specific deviation, nor shall it relieve the Contractor from errors or omissions in the shop drawings.

1-9. DEFINITIONS OF TERMS. In addition to the definitions listed in the printed form of contract, wherever the following words or phrases are used in these specifications their intent and meaning shall be as follows:


1-9-2. Engineer - the person designated by BEC, Inc. as its authorized representative.

1-10. SUBSTITUTIONS

1-10-1. All substitutions of products, equipment, materials and methods described in these specifications shall be made in consolidated requests for the various trades required to complete the work. Requests for substitution will not be considered unless the consolidated request has been submitted. Regardless of whether or not the phrase "or equal" or similar notation appears in the specifications or on the drawings, no substitutions will be allowed except upon written request of the Contractor and written approval of the Engineer. Requests for each substitution shall include the following:

A. A complete description of the proposed alternate material including sufficient technical data to enable the Engineer to quickly arrive at a decision as to the suitability of the substitution.

B. The reason for substitution.

C. A comparison of the price of the substitution with the price of the item specified.

D. A comparison of the delivery time required for the substitution with the delivery time required for the item specified.
E. Samples, if requested by the Engineer.

1-10-2. No request for substitution will be considered after approval of the consolidated request except written emergency request made because of nonavailability of the specified material, delay of delivery, or to adjust to unforeseen field conditions. This written emergency request for substitution shall be accompanied with a photostat of a letter from the supplier or manufacturer stating that he is unable to furnish the specified materials and the reasons that he is unable to furnish the materials.

1-10-3. The emergency request shall be made to the Engineer and shall be made as soon as the difficulty is known so that the Engineer shall have sufficient time to appraise the substitution. If the Contractor's proposed substitution in the emergency request is declined, the Engineer shall have the privilege of specifying a different substitute which has a price that does not markedly exceed the price of the item named in these specifications.

1-10-4. The Engineer's decision on approval shall be binding subject to the printed form of the contract.

1-10-5. The Contractor shall have provided in his proposal for furnishing the specified items named or described in these specifications or on the drawings, and if substitutions are declined by the Engineer, shall be prepared to provide the specified items at the proper time necessary to complete the contract work as scheduled. The Contractor having submitted a bid shall be a representation that his proposal price included the specified items and that he is able to supply the specified items.

1-10-6. The Contractor shall not be entitled to additional compensation for cost of extra work resulting from any substitutions requested by him. If the cost of the material substituted is less than the cost of the material specified, such savings in cost shall be credited to the Owner and deducted from the contract price.
I

1-11. CONTROL OF MATERIALS.

1-11-1. Source of Supply and Quality

A. If, after test(s), it is found that sources of supply which have been approved do not furnish a uniform product, or if the product from such source proves unacceptable at any time, the Contractor shall, at his own expense, take any and all steps necessary to furnish approved materials.

B. Where no inspection of materials is arranged for by the Engineer and before such materials are incorporated into the work, the contractor will be required to submit to the Engineer for approval, three copies of the manufacturer’s or supplier’s statement for each kind of material furnished, which shall certify compliance with the specifications and shall contain the following information:

(a) Project to which the material is consigned.

(b) Name of the contractor to which the material is supplied.

(c) Kind of material supplied.

(d) Quantity of material represented by the certificate.

(e) Means of identifying the consignment, such as label, marking, seal number, etc.

(f) Date and method of shipment.

(g) Statement to the effect that the material has been tested and found in conformity with the pertinent parts of the contract.

(h) Results of all required tests including the chemical analysis in the case of metal; or in lieu of furnishing the results a statement that results of all required tests pertinent to the certificate and not submitted shall be maintained available by the undersigned for a period of not less than three years from date of final acceptance or not less than three years from date of final payment to the State.

(i) Signature of a person having legal authority to bind the supplier.
1-11-2. Samples and Tests

A. The inspection and sampling of materials will be carried out, ordinarily, at the site of the contract work, by the Owner, or under its direction. The Owner will not assume any obligation for the inspection and sampling of materials at the source. The responsibility of incorporating satisfactory material in the work rests entirely with the Contractor, notwithstanding any prior inspection or test.

B. Tests of materials will be made by the Owner or under its direction. The Contractor or his suppliers shall furnish such facilities as the Engineer may require for collecting and forwarding samples, and shall not make use of, nor incorporate in the work, any material represented by the samples until the required test have been made and the material acceptable, unless otherwise directed. The Contractor in all cases shall furnish the required samples without charge.

C. Samples of materials such as crushed stone, gravel borrow, ordinary borrow, etc., will be inspected at the project site and approved for use.

D. However, such preliminary approval by the Engineer does not relieve the Contractor of the responsibility for placing satisfactory materials in the work as determined by subsequent samples taken at the source or on the project prior to the material being incorporated into the work and if the project samples test satisfactorily the material will be considered to meet the contract requirements as to quality. If such sampling and testing reveal that the material is unsatisfactory, it will then be the responsibility of the Contractor to remove it from the work or blend it with such other materials so that an acceptable material will be produced. The removal and blending of such material shall be done by the Contractor without additional compensation.

1-11-3. Delivery and Storage of Materials

A. Materials and equipment shall be progressively delivered at the site so that there will be neither delay in the progress of the work nor an accumulation of material that is not to be used within a reasonable time.
B. Materials shall be, so stored as to assure the preservation of their quality and fitness for the work. Stored materials even though approved before storage, may again be inspected prior to their use in the work. Stored materials shall be located so as to facilitate their prompt inspection.

C. Private property shall not be used for storage purposes without written permission of the Owner or lessee, and if requested by the Engineer copies of such written permission shall be furnished to him.

D. All storage sites shall be restored to their original condition by the contractor at his expense. This shall not apply to the stripping and storing of topsoil, or to other materials salvaged from the work.

1-11-4. Scheduling of Designated Sources of Materials

A. The Contractor shall designate the proposed sources of all materials in time to permit all required testing and inspection before the material is needed to be incorporated into the work. The Contractor shall have no claims because of his failure to designate the proposed source or to order the materials in time for adequate testing and inspection.

B. Necessary arrangements shall be made to permit the Engineer to make factory, shop or other inspection of materials or equipment ordered for the work in process of manufacture or fabrication or in storage elsewhere than the site of the work.

1-12. CONTRACTOR’S GENERAL RESPONSIBILITIES

1-12-1. In performance of the contract and insofar as his employees are concerned, the Contractor shall be responsible in addition to items specified elsewhere in the contract, for the following:

A. Safety and security of his own tools and equipment whether inside or outside of the construction area.

B. Protection of the construction site and all adjoining premises or property from all damage until the work has been accepted by the Owner, and making good at his own expense all damage thereto arising out of any contract operations.

C. Strictly prohibiting and taking all necessary measures to prevent the committing of nuisances on the land of the Owner and adjacent properties.
1-13. PROTECTION AND RESTORATION OF PROPERTY

1-13-1. The Contractor shall, at his own expense, preserve and protect from injury all property either public or private along and adjacent to the proposed work, and he shall be responsible for any repair at his own expense and all damage and injury thereto arising out of or in consequence of any act or omission, neglect or misconduct in the execution of the work, or in consequence of the non-execution thereof by the Contractor or his employees or Subcontractors in the performance of the work covered by the contract prior to completion and acceptance thereof. He shall exercise special care during his operations to avoid injury to underground structures such as water or gas mains, pipes, conduits, manholes, catch basins, direct buried electrical cables, etc.

1-13-2. Written notice shall be given by the Contractor to all public service corporations or officials owning or having charge of public or private utilities of his intention to commence operations affecting such utilities at least 48 hours exclusive of Saturdays, Sundays, and legal holidays in advance of the start of such operations in accordance with Chapter 82, Section 40, of the general Laws, as amended, and the Contractor shall at the time file a copy of said notice with the Field Engineer.

1-13-3. When necessary, the Contractor shall cooperate with representatives of public service companies in order to avoid damage to their structures by furnishing and erecting suitable supports, props, shoring, or other means of protection. Fire hydrants adjacent to the work at all times shall be readily accessible to fire apparatus and no material or other obstructions shall be placed within a radius of 10 feet of a fire hydrant.

1-13-4. Although the drawings may indicate the approximate location of existing subsurface utilities in the vicinity of the work, the accuracy and completeness of the information is not guaranteed by the Owner. Before commencing any work, or operations which may endanger or damage any subsurface structures, the Contractor shall carefully locate all such structures and conduct his operations in such manner as to avoid damage thereto. He shall not interrupt live services until new services have been provided. All abandoned services shall be plugged or other wise made secure.

1-13-5. If the Contractor wishes to have any utilities temporarily relocated for his convenience, other than those specified by the Owner, he shall make the necessary arrangements with the Owners and make reimbursement for the cost thereof at his own expense.
1-13-6. Land monuments and property markers shall be carefully protected, and if necessary, to remove the same, he shall do so only at the Field Engineer’s direction and after an authorized agent has witnessed or otherwise referenced their location.

1-13-7. The Contractor shall not injure or remove trees or shrubs without proper authority. Insofar as possible the Contractor shall confine his movements and operations to the area within the limits of the location and the area outside the scope of work shall not be disturbed.

1-13-8. The Contractor shall receive no extra compensation for protection and restoration of property unless said compensation is authorized in writing by the Owner, as specified on the printed form of contract.

1-14. CLEAN UP AND RESTORATION. After all construction operations are completed, the Contractor shall clean his area of operations of all boulders, stumps and debris and shall leave the area in clean and orderly condition. Any areas within or outside the limits of work, whether regraded or not, which have become scarred, rutted or eroded, due to conditions arising from work performed under this contract, shall be restored to their natural condition by filling and/or topsoiling, as directed by the Engineer.

1-15. COOPERATION WITH OTHERS. The Contractor shall coordinate his work with that of any Subcontractors working on the project and allow them all necessary access to the construction areas, so as to facilitate the progress of the work. The Contractor shall coordinate the work of all trades to complete the work within the time required. Each trade shall afford all other trades every reasonable opportunity for installation of their work and for storage of material.

1-16. WORKMANSHIP. All workmanship necessary to complete the work required by these specifications shall be of the highest quality. The Contractor shall, at all times, employ workmen in sufficient number and of the various degrees of skill and experience required to perform satisfactorily the work of these specifications in accordance with the best modern standard practice. The Contractor shall bear the entire expense and no separate or direct payment shall be made as a result of extra work which may be necessary because of inferior workmanship, or for specific items of work which are normally considered a part of good workmanship in completing any particular phase of the work.
1-17. DUST CONTROL. The Contractor is placed on notice that blowing dust from unstabilized earth areas of the work will be considered a nuisance under his control. He shall, by spraying with water or by other approved means, dampen the soil to hold down the dust. The use of calcium chloride as a wetting agent will not be permitted. During working hours and before leaving the work for the evening, for weekends, or for more extended periods, he shall assess the moisture content of the soil and dampen it to the extent necessary to hold down the dust. While work is suspended he shall return to work, if so directed by the Engineer to maintain the dust control.

1-18. LIENS. Neither the final payment nor any part of the retained percentage shall become due until the Contractor, if required, shall deliver to the Owner a complete release of all liens arising out of this Contract, or receipts in full in lieu thereof, and if required in either case, an affidavit that so far as he has knowledge or information the releases and receipts including all labor and material for which a lien could be filed; but the Contractor may, if any Subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the Owner, to indemnify him against any lien. If any lien remains unsatisfied, after all payments are made, the Contractor shall refund to the Owner all moneys that the latter may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney’s fee.

1-19. PAYMENT. The basis of payment is set forth at the end of each section of these specifications.

1-20. VEHICLE WEIGHT LIMITS

1-20-1. The Contractor’s attention is directed to Chapter 90, Section 19A of the General Laws as amended concerning the weight limits for construction type motor vehicles.

1-20-2. No materials supplied for the project shall be accepted in vehicles whose gross weight exceeds the legal load limits as determined by the regulatory agencies of the Commonwealth and Federal Government.

1-20-3. Weight slips that indicate the load exceeding the legal load limit shall not be countersigned by the Field Engineer.

1-21. SECURITY. The General Contractor shall be wholly responsible for patrolling and protecting the work under construction and the materials stored on the site and the existing work. The General Contractor shall have full responsibility for the security of the property and the Owner’s materials stored or otherwise located upon the site, and shall reimburse the Owner for any loss, damage, or injury to such materials, except as may be directly caused by the Owner, its agents, or its employees.
1-22. JOB MEETINGS. The General Contractor shall conduct regular job meetings once every week during the construction period and more often as required, at such time as is mutually acceptable by the Owner and Contractor. Major subcontractors and other trades or subcontractors may be called to particular job meeting as the progress of the work required.

1-23. CHANGES IN QUANTITIES, REGULATION OF WORK. The Owner reserves the right to increase or decrease quantities, to eliminate portions of the work or add work of similar nature, and to direct the commencement and order of prosecution of various portions of the work.

All costs incurred by the Contractor for Section 1A of the Special Conditions shall be included in the contract prices and no separate payment shall be made to the Contractor.

1-24. PROJECT PHOTOGRAPHS.

The Contractor shall arrange to furnish the Owner with 8" x 10" photographs showing the initial existing conditions of the areas to be disturbed by construction, and progress photographs to be taken during the entire course of construction for all phases of work at times and locations designated by the Engineer.

The back of each print shall be noted with the project number, contract number, date taken, location of camera, and direction of view. The prints shall be mounted on acetate folders.

For this Contract, the Engineer may require up to 30 photographs of initial existing conditions, and up to 20 progress photographs per month. Negatives of all photographs shall be furnished to the Engineer.

All costs of furnishing these photos and acetate folders with photos labeled and mounted shall be considered included in the various prices bid for other work under this contract.

1-25. PROJECT SIGN. A project sign shall be constructed in accordance with the Massachusetts DWPC standards. The colors, size and style of lettering wording will be given to the Contractor. The sign shall be mounted on two posts set into the ground a minimum of 3 feet with the earth tamped back in place to insure stability. Bracing shall be used if required in the opinion of the Engineer. Posts and bracing above ground line shall receive a lead and oil paint. The signs shall be erected a proper distance above prevailing grade to permit public viewing. The Contractor shall maintain the sign to the satisfaction of the Engineer until final acceptance, at which time it shall be removed from the job site and disposed of by the Contractor. Sign shall be erected where directed by the Engineer and approved of by the Owner.
K. TECHNICAL SPECIFICATIONS

Section 101 Control of Work
Section 201 Soil Erosion Control
Section 202 Site Clearing, Grubbing and Topsoil Removal
Section 203 Embankment Formation
Section 204 Riprap
Section 205 Chain Link Fence
Section 206 Underdrain
Section 207 Storm Drain Installation
Section 209 Turf Establishment
Section 210 Control Structures
Section 300 Hydraulic Dredging of Walker Pond
Section 400 Containment Area Regrading
Section 401 Containment Area Restoration
SECTION 101
CONTROL OF WORK

PART 1 - GENERAL

1.01 Description: Contractor shall provide materials testings (field and laboratory services) and land survey services as required by the specifications or as deemed necessary by the Engineer.

1.02 Quality Control: Contractor shall submit names of at least three land survey firms to the Engineer with field crew and office unit rates for the various services anticipated for this project. The Engineer will recommend the most suitable firm for the project for acceptance by the Owner. If all are rejected for whatever reason by the Engineer or Owner, the Contractor will submit three new firms.

The land survey firm must have a valid Licensed Commonwealth of Massachusetts Land Surveyor in responsible charge of services provided and if requested will provide qualifications and references.

The materials testing laboratory will be named by the Engineer and approved by the Owner.

PART 2 - MATERIALS

Not applicable

PART 3 - CONSTRUCTION METHODS

3.01 Survey: Contractor will utilize land survey services as agreed to by the Engineer to provide the necessary construction controls for proper line and grade and to measure the dredged material. In general anticipated services to be provided shall include but not be limited to:

3.01.A Construction staking of all controls to appropriately located containment area and flocculator basin construction activities.

3.01.B Provide cross sections at a 50 foot interval within the containment area at the end of each dredging season prior to construction activities.

3.01.C Establish control baseline and cross sections at a one hundred foot interval in areas of the lake proposed for dredging approximately perpendicular to the shore. Sections will
be field marked adequately for dredge to locate itself on the lake. Cross sections to indicate water surface and lake bottom shall be submitted to the Engineer for review. Sections will be returned to the Contractor prior to dredging with the proposed dredging limits. After dredging, surveyor will plot final lake bottom on the cross sections and submit to the Engineer for review and acceptance.

3.01.D Provide final cross sections and topography maps of containment area and flocculation basin.

3.02 Materials Testing: The named testing laboratory will provide all field sampling, transportation, laboratory testing and field testing as required. Test results will be delivered as required in the specifications to the Engineer within two days of actual testing.

3.03 Contractor will provide complete coordination and cooperate in all manners to assist the survey and testing services. Contractor will pay in full for all services provided within ten days of receipt of payment by Owner for services provided.

PART 4 - COMPENSATION

4.01 Payment for all land survey and testing services will be based upon the actual invoiced cost, plus ten percent, which cost shall include all materials, equipment, tools and labor incidental thereto, up to the specified allowance unless otherwise directed by the Engineer. Invoices will include copies of all laboratory and survey invoices.

<table>
<thead>
<tr>
<th>Payment Item</th>
<th>Up to Allowance Amount</th>
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</thead>
<tbody>
<tr>
<td>Control of Work</td>
<td></td>
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</table>
PART 1 - GENERAL

1.01 Description: Erosion and sedimentation control will be implemented prior to clearing and grubbing operations as shown on plans, and as necessary for supplemental insurance against sediment contamination of areas downslope of construction. All work shall be performed in compliance with the order of conditions issued by the Sturbridge Conservation Commission.

1.02 Submittals: Catalog cuts or shop drawings of all manufactured items shall be submitted for review by the engineer.

PART 2 - MATERIALS

2.01 Haybales: Bales shall be made of hay with forty pounds minimum weight and one hundred and twenty pounds maximum weight. Wood stakes shall be a minimum of 1 inch by 1 inch nominal size by a minimum of 3 feet long.

2.02 Silt Fence: Silt fence shall be of the following materials; fabric shall be industrial polypropylene with ultra violet inhibitors, such as Amoco Construction Fibers Silt Stop, Mirafi Envirofence 100; or equal. Wood posts shall be 2" x 2" section pre-weathered structurally sound hardwood, minimum length 3.5'.

PART 3 - CONSTRUCTION METHODS

3.01 Haybales: Shall be placed as shown on the plans or as directed by the engineer. They shall be held in place by two wooden stakes in each bale, end to end. Bales shall be maintained or replaced until they are no longer necessary for the purpose intended or are ordered removed by the engineer. Accumulated silt shall be removed as necessary, particularly after a storm event, to maintain the integrity of the installations. Dispose of removed silt where directed by the engineer.

3.02 Silt fence: Shall be installed as shown on the plans or as directed by the engineer and as recommended by the fabric manufacturer. The bottom six inches of the fabric shall be buried by either trenching, laying the six inch section horizontally across the trench and burying or by laying the six inch section horizontally on the ground and burying by ramping the soil up to the control fence. Install posts a maximum of 7 feet on center.
The installations shall be maintained or replaced until they are no longer necessary for the purpose intended or are ordered removed by the Engineer. The filter fabric fence systems will be completely removed from the project at the completion of the project, unless specifically authorized by the engineer to be left in place.

3.03 Additional Erosion Controls: Any soil areas which will remain exposed for prolonged periods of time defined as in excess of 15 consecutive days, (such as stockpiled sediment materials or topsoil) will be protected from erosion by the establishment of a temporary cover of perennial rye grass or other accepted cover, at the contractor's expense. The Contractor assumes the full liability for any environmental or otherwise nuisance consequences arising from any form of water or wind erosion during construction. The Contractor also assumes the full cost for the prevention of any erosion, beyond the haybale and silt fence erosion controls shown on the plans.

PART 4 - COMPENSATION

4.01 Silt fence and haybale barriers shall be paid for at the contract unit prices per l.f. silt fencing and haybale barrier in place and accepted. All silt removal and disposal, repair and replacement of silt fences and haybale barriers will not be paid for, but the cost of such maintenance will be included in the initial unit price. Temporary cover will not be paid for as an individual item but as a general condition of work to be included in unit prices of other work.

Payment Items

| Soil Erosion Control | Linear Foot |
SECTION 202
SITE CLEARING, GRUBBING AND TOPSOIL REMOVAL

PART 1 - GENERAL

1.01 Description: Clearing, grubbing, and stripping of topsoil shall consist of all work necessary to prepare sites to be regraded. These items include clearing, grubbing, cutting, removal and disposal off site of all vegetation and debris from areas within the limits of work and as shown on the plans or designated by the Engineer. In addition, the work shall include stripping of topsoil, which is to be stockpiled for future use or for removal by others. All work described here shall also include the preservation from injury or defacement of all vegetation and objects designated by the Engineer to remain.

PART 2 - MATERIALS

Not Applicable.

PART 3 - CONSTRUCTION METHODS

3.01 Clearing and Grubbing: The Contractor will establish clearing lines based upon the proposed construction and field review with the Engineer prior to clearing. All erosion controls will be installed and reviewed with the Engineer prior to any construction. All debris and vegetation shall be removed from areas to be regraded by cut or by fill for the embankment formation and at locations along access roadways necessary to provide a ten foot minimum access road width. The stumps of all trees, brush, and major roots shall be grubbed and removed. Unstable trees adjacent to areas to be regraded shall be removed, as directed by the Engineer, with stumps to remain.

The burning of trees, brush, stumps, etc., will not be permitted. The Contractor shall provide other satisfactory methods of disposal without additional compensation. The Contractor shall assume disposal will not be allowed within the Park unless given written permission by Park Officials. Any clearing for the Contractor's convenience shall be done at his own expense. All such areas shall be restored to a condition acceptable to the Engineer including necessary mulching, seeding, and planting without additional compensation.

The Contractor shall make all arrangements and negotiations necessary for the satisfactory disposal of trees, shrubs, stumps, roots, dead wood and other litter, and in such manner that no condition or accumulation of material shall be permitted to disfigure or mar the finished landscape.
Trees and shrubs that are specifically designated by the Engineer not to be cut, removed, destroyed or trimmed shall be saved from harm and injury. Trees not specified to be removed which are damaged by the Contractor's operation shall be trimmed and painted where cut as directed.

3.02 Stripping Topsoil: Prior to general excavation and embankment formation, all topsoil shall be stripped from the areas to be regraded. Topsoil shall be stockpiled on site as shown on the plan or as approved by the Engineer for use in topdressing of newly graded slopes. Surface drainage shall be directed away from excavated area to the greatest extent possible. Stockpiled earth materials shall be seeded and maintained to prevent erosion as specified in Soil Erosion Control. Notify Engineer of any unexpected subsurface conditions. Discontinue work in the area until Engineer provides notification to resume work.

3.03 Additional Erosion Controls: Contractor is warned that site contains very steep slopes and potentially erodable soils. During all operations care shall be taken not to disturb stable vegetated areas not proposed for regrading. Any area that erodes as a result of disturbance by the Contractor will be rebuilt in a manner to the satisfaction of the Engineer at no additional cost to the Owner.

PART 4 - COMPENSATION

4.01 Site Clearing, Grubbing, and Topsoil Removal will be paid for at the contract lump sum price complete and accepted. Included in the payment for this item is all excavation, stockpiling and/or disposal of materials, equipment, tools and labor incidental to the completion of this section.

Payment Item

Site Clearing, Grubbing and Topsoil Removal Lump Sum
SECTION 203
EMBANKMENT FORMATION

PART 1 - GENERAL

1.01 Description: The work in this section shall consist of the excavation in the basin areas and along access roads supplying, hauling, stockpiling and grading ordinary borrow, special borrow and crushed stone, proper formation of all embankments for the containment basin and flocculation basin, all access roads and staging areas including removal and disposal of unsuitable materials, stockpiling of excess material and topsoil supplying and placement and seeding. Included in this price is also the maintenance of all roadways and slopes.

1.02 Quality Assurance: The Contractor shall employ a testing laboratory named by the Engineer. Testing laboratory shall collect samples and:

a. Submit four copies of gradation report on the ordinary and special borrow and crushed stone to be used on the project directly to the Engineer with copy to the Contractor. Gradation tests will be performed for each distinctive type of borrow and/or material source. The source of borrow will be identified for each sample.

b. Conduct laboratory compaction test for each distinctive type of material to be incorporated into the embankments in accordance with ASTM D698-64T, Method C. The laboratory will also determine the optimum moisture content of the material and submit a moisture density curve for each type of material. Four copies will be submitted directly to the Engineer with copy to the Contractor.

c. Submit four copies of field density test reports directly to the Engineer with copy to the Contractor. Tests will be performed in accordance with ASTM D1556 (sand cone method), or ASTM D2167 (rubber balloon method), or ASTM D2922 (nuclear density method). The number of in-place field density tests shall be determined by the Engineer.

1.03 Existing Utilities: Contractor shall locate existing underground utilities in the areas of work. If utilities are to remain in place, provide adequate means of protection during earthwork operations. Call before digging, Dig Safe, 1-800-322-4844. Contractor shall coordinate all activities near utility locations with respective utility representatives.
Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult the Utility Owner immediately for directions. Cooperate with Owner and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to satisfaction of utility owner.

Do not interrupt existing utilities serving facilities occupied and used by Owner or others, except when permitted in writing by Engineer and then only after acceptable temporary utility services have been provided.

Demolish and completely remove from site existing underground utilities indicated to be removed. Coordinate with utility companies for shut-off of services if lines are active.

Contractor will coordinate all work activities with impacted utilities and will not seek additional compensation due to delays or costs associated with schedules or impacted utility relocations.

1.04 Use of Explosives: Do not bring explosives onto site or use in work without prior written permission from authorities having jurisdiction in the Park and Town. Contractor is solely responsible for handling, storage, and use of explosive materials when their use is permitted.

1.05 Protection of Persons and Property: Barricade open excavations occurring as part of this work and post with warning lights. Operate warning lights as recommended by authorities having jurisdiction.

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

PART 2 - MATERIALS

2.01 Ordinary Borrow, Special Borrow and Crushed Stone: All embankment materials, whether coming from excavation or borrow shall consist of solid, sound mineral aggregate. It shall be free from deleterious, organic, elastic or foreign matter and shall be adequately graded for satisfactory compaction into a stabilized soil structure.

These materials will be classified into particular groups according to AASHTO Designation M145, "The Classification of Soils and Soil Aggregate Mixtures for Highway Construction Purposes".
All borrow material to be furnished shall meet the requirements specified in the following Subsections of the Mass. DPW Standard Specifications for Highway and Bridges, Division III Materials:

Ordinary Borrow M1.01.0
Special Borrow M1.02.0
Crushed Stone M2.01.4

2.02 Topsoil: Topsoil shall be good quality friable soil free of stones over two inches, objectionable weed roots or seeds, clay lumps, sticks, trash, or other extraneous material. The soil shall have an organic content greater than 1.5% by weight and shall not contain salt greater than 500 parts per million.

2.03 Filter Fabric: Fabric shall be non-woven polypropylene fabric such as Mirafi 140N manufactured by Mirafi, Inc.; or equal.

PART 3 - CONSTRUCTION METHODS

3.01 Inspection: Examine the areas and conditions under which excavating, filling, and grading are to be performed and notify the Engineer in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in an acceptable manner. Access road alignment may be altered by the Contractor from that on the plan after field review and concurrence with the Engineer.

3.02 Excavation: Excavation consists of removal, stockpiling and/or disposal of ordinary borrow, special borrow or unsuitable materials encountered when establishing required grade elevations or when removing material down to suitable material. Suitable material is defined as inorganic sand or gravel having a grain size distribution within allowable ranges for ordinary borrow. In areas of deep unsuitable materials, Contractor, with approval of the Engineer, may underlie borrow with filter fabric in lieu of excavation as shown on the plans and as recommended by the fabric manufacturer. All excavation shall be unclassified and shall include any and all material encountered. All stone or rock greater than four inches in size shall be removed and disposed of by the Contractor.

Excavations may be made above or below water and shall conform to the proposed contours, elevations and dimensions shown within a vertical tolerance acceptable to the Engineer. Excavation shall be to a depth necessary to provide for any subsequent loam, riprap or other specified surface material.
Unsuitable materials not to be used on-site will be removed and disposed of by the Contractor.

3.03 Grading: Prior to placing fill in any area, grading shall be performed as required to provide for drainage. Within the area, the ground on which fill is to be placed shall be graded to provide for unobstructed drainage from every point. When the fill area has been prepared as specified above, the natural ground surface shall be compacted by methods approved for compaction of fill. No separate measurement and payment will be made for this grading; the cost shall be included in the unit prices of other items under this section.

3.04 Placement of Special Borrow: At embankment areas delineated on the plans for special borrow and at other locations where the excavation of unsuitable material has been accomplished underwater, the unsuitable material shall be replaced with Special Borrow. Material shall be placed to dimensions as shown on the plans and as directed by the Engineer. This includes bringing the materials to elevations one foot above ground water or as shown on the plans.

Filling may be accomplished in small sections as the excavation progresses or after all excavation of unsuitable material is completed.

If water is encountered as a result of excavation of unsuitable material, fill material may be placed and compacted underwater.

When underwater, the Contractor shall place the bottom layer with a thickness such that the compaction equipment for this layer will not be in more than 1.5 feet nor less than 1 foot of water when the compaction is completed. The Contractor should note that if substantially deeper excavations and fillings are required than those reasonably anticipated, then substantially larger placement and compaction equipment may be required.

Subsequent layers above the bottom layer shall not exceed 12 inches in thickness prior to compaction.

Placement of fill on frozen ground or placement of frozen fill material will not be permitted.

Compaction shall be accomplished in accordance with the requirements specified. Costs shall be included in unit price items given below.

3.05 Placement of Ordinary Borrow: Ordinary Borrow will be placed to form embankments as shown on the plans in all areas above ground water. Also in areas above ground water outside the area designated on the plans for special borrow where unsuitable material was removed, replace the unsuitable material with Ordinary Borrow. Placing and compaction of the Ordinary Borrow shall be as specified below.
Construct embankments at locations, to configurations and to dimensions as shown on the plans and as directed by the Engineer. This includes containment embankments, access road embankments and other earthwork as shown in the plans.

Filling shall begin in the lowest section of each area. Fill shall be spread in layers measuring twelve inches in thickness prior to compaction. The surface of each layer shall be approximately horizontal, but shall be provided with sufficient longitudinal and transverse slope to provide for runoff of surface water from every point. Filling shall be conducted so that no obstruction to drainage from other sections of the fill area will be created at any time. Sumps, if any, shall be continuously maintained in effective operating condition.

Each layer of fill will be subject to inspection prior to compaction. All visible roots, vegetation, or debris shall be removed. Stones larger than the allowed sizes shall be removed or broken. Unsatisfactory material incorporated in the fill will be subject to rejection and removal at the Contractor's expense. Placement of fill on frozen ground or placement of frozen fill material will not be permitted.

3.06 Compaction: The Contractor shall describe the type or types of compaction equipment which he proposes to furnish for use under this Contract. If, in the opinion of the Engineer, any proposed type is considered unsuitable or inadequate, the Contractor will be required to select and furnish an alternate approved type or to demonstrate by field trial, conducted at his own expense, that the originally proposed type will perform in a satisfactory manner. Testing of such field trials will be paid for by the Contractor.

Regardless of the provisions of any other section of the specifications, the compaction equipment shall be operated to make a minimum of three passes over each section of each layer of fill. Each successive pass shall overlap the adjacent pass by not less than 10%. Passes made over material in unsuitable condition will not be considered in judging compliance under this specification.

Compaction of the Ordinary Borrow shall be performed only when the material placed in the layer to be compacted is in an approved condition of moisture content. In the absence of a specific waiver of these provisions, the approved condition shall be that which exists when the moisture content is within the range of 4% less to 3% more than the optimum moisture content type established by laboratory compaction tests which are subsequently defined.

Compaction of all other materials shall be at moisture content selected by the Contractor.
The Contractor shall furnish equipment for modifying the moisture content of the fill material and at times when the moisture content is not within a workable range, shall operate such equipment to achieve the necessary correction with minimum loss of time.

The addition of water shall be accomplished by methods which distribute the added water evenly and in a controlled manner over the fill. Reduction in water content shall be accomplished by methods which are effective for promoting aeration of the fill material. No fill shall be placed until approved types of equipment for aeration and for addition of water are on the job and are demonstrated to be in satisfactory operating condition.

Compaction of the fill material shall continue until the unit dry weight of the fill reaches a value not less than 95% of the maximum unit dry weight attained in a laboratory compaction test as previously specified. The percentage compaction of the fill at the point of the in-place moisture-density test will be computed as follows:

\[
\text{Percentage compaction} = \left( \frac{D(f)}{D(l)} \right) \times 100
\]

in which

\[
D(f) = \text{unit dry weight in lb/cu ft of sample used in field moisture-density determination}
\]

\[
D(l) = \text{maximum unit dry weight in lb/cu ft obtained in a specified laboratory compaction test on a sample of the same type of material.}
\]

If the percentage compaction at any point is found to be unacceptable, additional compaction with or without modification of the field moisture content is directed, shall be performed and a second moisture-density determination made. This procedure shall be repeated until satisfactory compaction is obtained.

The Contractor shall arrange for prompt submittal of test certificates. Should any certificate indicate inadequate compaction, the Contractor shall remove all material which has been placed above the layer in which the certified test was performed and shall reconstruct and compact this section of the fill in an approved manner at no additional cost to the Owner. Also, no reimbursement for laboratory testing will be made when testing was repeated.
3.07 Excess Suitable Material: At the completion of the embankment formation for the containment and flocculation basins, it is anticipated that excess sand and gravel material will remain. Contractor will deposit at specified stockpile areas within Wells State Park up to 3,500 cubic yards as indicated on the attached locus plan. Remaining excess material shall be utilized to form the dike around the temporary disposal area to be utilized for dredge materials after the first season as indicated on the plans.

3.08 Placement of Topsoil: Topsoil shall be placed on slopes of embankments as shown in the plans and in areas outside the containment basins disturbed by construction operations. No additional payment for topsoil placement outside the containment basins will be made.

Previously stripped and stockpiled topsoil shall be utilized to the extent possible. If excess topsoil material, is available, depth of topsoil shall be increased. If available topsoil is inadequate, Topsoil Borrow shall be utilized to provide the 4" minimum depth.

The areas on which topsoil is to be placed shall be graded to a reasonably true surface. Topsoil shall then be spread and shaped to the lines and grades shown on the plans, or as directed by the Engineer. Depth of topsoil shall be 4" typical in all areas. This depth is that required after settlement of the material has taken place. All stones, roots, debris, sod, weeds and other undesirable material shall be removed. After shaping and grading, all trucks and other equipment shall be excluded from the topsoiled area to prevent excessive compaction. The Contractor shall perform such work as required to provide a friable surface for seed germination and plant growth prior to seeding.

3.09 Turf Establishment: All topsoiled areas shall be seeded, fertilized and mulched in accordance with the specification, "Turf Establishment", including application of jute mesh on all slopes in excess of 6 horizontal to one vertical. Seeding by spray machine is an acceptable method of application. If by spray, a certified statement shall be furnished prior to start of work by the Contractor as to the number of pounds of limestone, fertilizer, seed and mulch per 100 gallons of water and the rate of application per 1000 square feet. If application results are unsatisfactory in the opinion of the Engineer, the Contractor shall reapply the mixture until a suitable growth is established.
3.10 Maintenance: It shall be the Contractor’s responsibility to restore to the line, grade and surface all eroded areas with approved material and to keep topsoiled areas in acceptable condition until the completion of the construction work. No additional measurement or payment will be made for supplemental erosion repairs or installation of erosion controls such as stone or slope protection.

PART 4 - COMPENSATION

4.01 Embankment Formation will be paid for at the contract lump sum price for Embankment Formation, complete and accepted. It is clearly understood that within the lump sum price is the construction of basins including all access roads and embankments and other earthwork as shown on the plans. Included in the payment for these items is all excavation, supplying, stockpiling, hauling, disposal, ordinary borrow, special borrow, toe drains, topsoil, placement, compaction, grading, limestone fertilizer, seed, mulch and jute mesh and all other materials, equipment, tools and labor incidental thereto as well as the maintenance and repair of all slopes. If topsoil borrow is necessary, it will be paid for at the bid unit price per cubic yard. No separate payment will be made for the turf establishment as part of this work.

Payment Item

| Embankment Formation | Lump Sum |
| Topsoil Borrow | Cubic Yard |

K-15
SECTION 204

RIPRAP

PART 1 - GENERAL

1.01 Description: Riprap shall be installed as shown on the plans at the pipe outlet splash pads and as slope protection and elsewhere if requested by the Engineer.

1.02 Quality Assurance: The Contractor shall employ a testing laboratory named by the Engineer. Testing laboratory shall submit four copies of a gradation report on the Riprap to be used on the project directly to the Engineer with copy to the Contractor.

PART 2 - MATERIAL

2.01 Riprap: Riprap shall conform to the following gradation:

<table>
<thead>
<tr>
<th>Stone Size</th>
<th>% of the mass</th>
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<tr>
<td>18&quot; or over</td>
<td>0</td>
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<tr>
<td>10&quot; to 18&quot;</td>
<td>30-50</td>
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<tr>
<td>6&quot; to 10&quot;</td>
<td>30-50</td>
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<tr>
<td>4&quot; to 6&quot;</td>
<td>20-30</td>
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<tr>
<td>2&quot; to 4&quot;</td>
<td>10-20</td>
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<tr>
<td>less than 2&quot;</td>
<td>0-10</td>
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2.02 Filter Fabric: Fabric shall be polypropylene with ultraviolet inhibitors, such as Mirafi 140N manufactured by Mirafi, Inc.; or equal and conform with Section M9.50.0 Table I Fabric of the Commonwealth of Massachusetts, Department of Public Works, Standardized Specifications for Highways and Bridges 1988 as amended.

PART 3 - CONSTRUCTION METHODS

3.01 The area to be protected by riprap shall be accurately shaped prior to placing of any riprap. A layer of filter fabric shall be placed under all riprap areas. The riprap shall be placed to its full course thickness in one operation in such a manner as to produce a reasonably well-graded mass of rock without causing displacement of the underlying material. The finished surface shall be free from pockets of small stones and clusters of larger stones. Placing this material by methods likely to cause segregation of the various sizes of stone will not be permitted. Rearranging of individual stones by mechanical or hand methods will be required to the extent necessary to
or hand methods will be required to the extent necessary to obtain a reasonably well-graded distribution of the specified stone sizes. The completed course shall be of the specified thickness and to the lines and grades as shown on the plans or as ordered by the Engineer.

3.02 Riprap shall be placed to a minimum depth of one foot six inches.

PART 4 - COMPENSATION

4.01 Riprap placements will be measured for payment by the actual number of cubic yards of riprap indicated including all materials, filter fabric, testing, excavation, shaping, backfilling, equipment, tools, and labor incidental thereto.

<table>
<thead>
<tr>
<th>Payment Item</th>
<th>Cubic Yard</th>
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<tbody>
<tr>
<td>Riprap</td>
<td></td>
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</table>
SECTION 205
CHAIN LINK FENCE

PART 1 - GENERAL

1.01 Description: Work under this item shall consist of furnishing and installing woven wire fencing of the type and height specified and supported by metal posts erected where indicated on the plans, including all gates.

PART 2 - MATERIALS

2.01 The materials for this work shall conform to the requirements of Article M8.09.0 in the Commonwealth of Massachusetts Department of Public Works Standard Specifications for Highways and Bridges, 1988, as amended.

2.02 Where the item "Chain Link Fence" is called for, the Contractor shall have the option of using either aluminum chain link fence or aluminum-coated chain link fence. However, only one type of chain link fence shall be used on the project under the "Chain Link Fence" item.

When aluminum-coated steel fabric is used, the posts and hardware will be galvanized. When aluminum fabric is used, the posts and hardware will be aluminum.

PART 3 - CONSTRUCTION METHODS

3.01 The posts shall be spaced in line of fence not further than 10 feet on centers. Intermediate or line posts, except where indicated on the plans, may be driven by mechanical means. A suitable driving cap shall be used to insure that no damage is caused to the post or galvanized coating. Posts not driven, and all other type posts shall be set in concrete as shown on the plans.

In earth, the hole for the concrete footing shall extend at least 4 inches below the bottom of the post but not less than 9 inches in diameter for all line posts and 12 inches in diameter for terminal, pull or corner posts. The tops of the concrete footings shall be crowned to shed water.

When ledge rock is encountered, the posts shall be set in holes drilled into rock at least 12 inches in depth and grouted or otherwise firmly held in correct position.
For fence 5 feet in height or less where runs of fence are 100 feet or over, end posts shall be braced. All corner posts where runs are over 100 feet in either direction shall have two braces. For fence more than 5 feet in height, end posts shall be braced; and corner posts shall have two braces.

Pull posts with two braces shall be provided for all heights where changes in horizontal or vertical alignment of ten (10) degrees or more occur.

Where braces are required, they shall be spaced as indicated on the plans.

Braces shall be securely fastened to posts by suitable connections and trussed from line post back to post requiring bracing with 3/8-inch round rod, having a turnbuckle adjustment.

Where a top rail is used, it shall pass through the base of the line post cap and form a continuous brace from end to end of fence. The rail shall be provided with couplings approximately every 20 feet. The couplings shall be of the outside-sleeve type and at least 7 inches long, one coupling in every five to have a heavy spring to take up expansion and contraction in the top rail.

Fabric shall be fastened to line posts with bands or wire clamps of No. 6-gage aluminized or PVC coated steel wire 4-3/4 inches long. These bands shall be spaced approximately 15 inches apart. The fabric shall be fastened to the top rail with tie wires. These tie wires shall be 6-1/4 inches long, spaced approximately 24 inches apart.

If a top rail is not specified, a top tension wire shall be provided. The tension wire shall be one continuous length between pull posts. Sufficient tension shall be applied to provide a wire without a visible sag between posts. Tension wires shall be tied or otherwise fastened to end, gate, corner or pull posts by a method acceptable to the Engineer. Ties and clips shall be provided for attaching the tension wire to the fabric at intervals not exceeding two (2) feet.

Where it is not practicable to conform the fence to the general contour of the ground, as at ditches, channels, etc., the opening beneath the fence shall be inclosed with chain link fabric and sufficiently braced to preclude access, but not to restrict the flow of water.

3.02 Fence gates shall be installed in the number and at the locations as shown on the plans.
3.03 Contractor shall maintain the fence over the entire life of the contract and repair at no added cost all breaks or downed fencing fabric or posts.

PART 4 - COMPENSATION

4.01 All work under this item shall be measured and paid for at the contract unit price per linear foot complete in place. Price shall include all materials, equipment, tools, excavation, backfill, disposal of surplus material, maintenance and final removal and labor incidental thereto. Gates will be measured in the closed position and are part of the unit price.

Removal and Resetting fencing for the Contractors' convenience and for maintenance will not be measured for payment.

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<th>Payment Item</th>
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<tr>
<td>Chain Link Fence Linear Foot</td>
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K-21
PART 1 - GENERAL

1.01 Description: The work of this section shall consist of all labor, materials, service and equipment necessary to construct the perforated pipe underdrain systems as shown on the plans. This work shall include trench excavation, placing bedding material, laying perforated polyethylene corrugated drainage tubing and SDR 35 PVC pipe with couplings, backfilling and installing joints, elbows, and end fittings as required. Construction shall be at the locations shown on the plans or determined in the field by the Engineer.

1.02 Quality Assurance: The Contractor shall employ a testing laboratory named by the Engineer. Testing laboratory shall submit four copies of a gradation report on the crushed stone to be used on the project directly to the Engineer with copy to the Contractor.

Contractor shall submit four copies of a shop drawing detailing the underdrain and all fittings to be used on the project to the Engineer for review for conformance with the specifications.

PART 2 - MATERIALS

2.01 Perforated Polyethylene Corrugated Drainage Tubing and Fittings: Perforated polyethylene corrugated drainage tubing and fitting shall conform to the requirements of ASTM 405-82, Corrugated Polyethylene Tubing and Fittings as manufactured by Advanced Drainage Systems, Inc. of Palmer, Mass. or approved equal. Poly Vinyl Chloride (PVC) pipe shall be SDR 35 and shall conform to MDPW Standards Section M5.03.07. Same manufacturer shall furnish all tees, end fittings, connecting bands and related materials, as required to complete the underdrain installation.

2.02 Crushed Stone: Crushed stone for placement as shown on the plans shall consist of sound, tough, durable stone free from soft, thin, elongated or laminated pieces and vegetable or other deleterious substances. Stone shall conform with the requirements of Section M2.01.4 of the Commonwealth of Massachusetts DPW Standard Specifications for Highways and Bridges, 1988, as amended.
PART 3 - CONSTRUCTION METHODS

3.01 Installation: Installation of the underdrain systems shall be in substantial conformance with ASTM F 449 "Standard Recommended Practice for Subsurface Installation of Corrugated Thermoplastic Tubing for Agricultural Drainage or Water Table Control" except as modified by the plans or as directed in the field by the Engineer. In fill areas, underdrains shall be installed after fill has been placed and compacted.

Care shall be taken to prevent damage to the tubing during the backfilling operation and SDR 35 PVC pipe shall be used under embankment areas as shown on the plans. Avoid dropping large clods or rocks directly on tubing. Damaged tubing or fittings will be removed and replaced by the Contractor at no additional cost to the Owner.

Firmly join all sections and fittings together as recommended by the manufacturer. The underdrain shall be installed as shown on the plans and capped at outlet. Contractor shall notify the Engineer after all pipe and fittings are installed and prior to backfilling with crushed stone.

PART 4 - COMPENSATION

4.01 Underdrain system will be measured for payment by the actual number of linear feet of drain installed complete and accepted in place. Included in the payment in this item is trench excavation, bedding, backfill material, piping materials and fittings, laying and jointing of underdrain system, and all other materials, equipment, tools, and labor incidental thereto. This same payment item will apply to 4" diameter and 6" diameter underdrains.

<table>
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<tr>
<th>Payment Item</th>
<th>Linear Foot</th>
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<td>Underdrain</td>
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SECTION 207
STORM DRAIN INSTALLATION

PART 1 - GENERAL

1.01 Description: Storm drain installation shall consist of furnishing all labor, materials, and equipment to excavate, install, backfill, compact and test new pipe culverts with manholes and headwalls and tieing into existing natural drainage at the locations and to the lines and grades designated on the plans or established by the Engineer.

1.02 Submittals: Submit catalog cuts for all manufactured items specified for Engineer’s review.

1.03 Testing and Inspection Service: The Contractor shall employ a geotechnical consultant and testing laboratory acceptable to Engineer to perform soil testing and inspection service for quality control testing during backfill operations.

1.04 Test Reports: Submit 4 copies of the following reports directly to the Engineer from the testing services, with copy to the Contractor:

- Graduation reports on borrow material.
- One moisture density curve for each type of borrow and native soil encountered.
- Field density test reports.

PART 2 - MATERIALS

2.01 Pipe, joints, and fittings materials shall meet the requirements specified in the following subsections of Mass. DPW Standard Specifications for Highways and Bridges Division III.

Materials:
- Reinforced Concrete Pipe M5.02.1
- Jointing Materials for Pipes M9.10.0
2.02 Concrete for manholes, catch basins, and headwalls shall meet the requirements of Mass. DPW Standard Specifications for Highways and Bridges, Section 901 Cement Concrete Masonry. Other materials shall meet the requirements specified in the following Subsections of Division III, Materials.

Materials:

- Cement Concrete Brick M4.05.0
- Precast Units M4.02.14
- Cement Mortar M4.02.15
- Reinforcing Bars M8.01.0, 1 and 2
- Iron Castings M8.03.0
- Steel Castings M8.03.2
- Crushed Stone M2.01.3

2.03 Backfill Materials: All backfill materials, whether coming from excavation or borrow shall consist of solid, sound mineral aggregate. They shall be free from deleterious, organic, elastic or foreign matter and shall be adequately graded for satisfactory compaction into a stabilized soil structure.

These materials will be classified into particular groups according to AASHTO Designation M 145, "The Classification of Soils and Soil Aggregate Mixtures for Highway Construction Purposes."

All borrow material to be furnished shall meet the requirements specified in the following Subsections of Division III, Materials, of the Mass. DPW Standard Specifications for Highways and Bridges.

- Ordinary Borrow M1.01.0
- Gravel Borrow M1.03.0 Type b
- Sand Borrow M1.04.0 Type b
- Crushed Stone for Drainage Structure Foundations M2.01.3

PART 3 - CONSTRUCTION METHODS

3.01 Trench Excavation: Trench excavation shall be made in conformity with the requirements of the plans or as ordered. The Contractor shall furnish and employ such shores, braces, sheeting, pumps, etc., as may be necessary for the protection of property, proper completion of the work and the safety of the public and employees of the Contractor. All bracing, sheeting, etc., shall be removed when no longer required for the construction or safety of the work.

Trenches for pipes shall be excavated to the required line and grade shall be of sufficient width to permit thorough tamping of backfill material under the haunches. Soft or unsuitable material existing below the required bedding grade shall be
removed as directed and replaced with sand, gravel, crushed stone or other suitable material and thoroughly compacted. Rock or boulders shall be removed below the bedding grade.

The Contractor shall take special care during excavation to avoid damage to any underground structures or utilities. When necessary, the Contractor shall cooperate with representatives of public service companies in order to avoid damage to their structures by permitting them to erect suitable supports, props, shoring, or other means of protection.

If cross pipes, conduits, drains, or other unforeseen obstacles are encountered during the excavation, the proposed line and grade of the pipe may be altered, but only as directed by the Engineer.

When culverts, storm drains, or sewer pipes are to be installed in roadway areas, the edges of the trench through the pavement shall be cut to a neat line, using an approved pavement breaker or power saw.

After the excavation is completed, the Contractor shall notify the Engineers; and no masonry, pipe, or other material shall be placed in the excavated area until the Engineer has approved the depth of excavation and the character of the foundation material.

3.02 Pipe Installation: All pipe shall be laid to the specified line and grade, with a firm bearing throughout each length. Normally, the placement of pipe shall start at the downstream and progress upstream. All pipe shall be carefully laid, true to the lines and grades given.

If so ordered by the Engineer, any pipe which is not in true alignment, or which shows any settlement or distortion after laying, shall be taken up and relaid or corrected, to the satisfaction of the Engineer without additional compensation.

3.03 Pipe Bedding: The bottom of the trench excavated to the required depth for storm drain installation shall be graded to the elevation of the bottom of the bedding material or to afford a uniform firm bearing for the pipe throughout its entire length, whichever the case may be. When rock is encountered, it shall be excavated to not less than 6 inches below the bottom of the pipe; and this depth shall be refilled with bedding material which shall be thoroughly tamped.

Where the nature of the foundation is poor, the culvert shall be relocated in firm materials if possible and acceptable to the Engineer. Where this cannot be done, the poor material shall be removed and replaced with a layer of gravel fill of such depth as the Engineer may direct; or special construction of the character shown on the plans may be employed.
Before placement of bedding materials, trenches shall be free of building debris, snow, ice, and water and ground surfaces shall not be frozen. Bedding materials shall be as shown on plans. When crushed stone is called for, the minimum total depth of crushed stone shall be 6 inches. No compaction will be required for depth up to 12 inches. For any depth over 12 inches, the crushed stone shall be placed and compacted in the dry in layers not to exceed 6 inches. Compaction will be accomplished by means of mechanical or pneumatic tampers. Compaction shall continue until the stones are firmly interlocked and the surface is unyielding.

Concrete cradles shall be class A concrete, constructed as shown. The beddings for the pipes shall be shaped to conform reasonably close to the lower 10% of the pipe and recesses excavated for bells of bell and spigot pipes.

3.04 Backfill and Compaction: All backfill shall consist of suitable materials uniformly distributed and thoroughly compacted. When suitable backfill materials cannot be obtained from excavation, the material shall consist of satisfactory borrow.

Mechanical tampers shall be used in compacting backfill for trenches, and in hard to reach areas around masonry. No backfill whatever shall be placed on or against structures, pipes, or other masonry, until permitted by the Engineer. It shall be formed of successive layers not more than 8 inches in depth, uniformly distributed and each layer thoroughly compacted.

No load greater than 8 tons shall be moved over any pipe until a fully is not compacted backfill of at least 2 feet has been placed over the top of the pipe. This minimum will be increased to 3 1/2 feet for a 40,000 pound single wheel load and to 4 feet for a 60,000 pound single wheel load. Compliance with this requirement is not to be construed as relieving the Contractor of any responsibility concerning damage to the pipe.

Backfill material shall consist of approved excavated material or gravel borrow. Material used for backfilling to a point 2 feet over the pipe shall contain no stones larger than 3 inches in greatest dimension.

Backfill below the haunches shall be placed in 6 inch layers and compacted simultaneously on both sides of the pipe with railroad tampers or approved mechanical rammers which shall not come in contact with the pipe. Backfill above the haunches shall be placed in 6 inch layers and compacted as directed. Backfill material shall be moist prior to and during compaction.

In all cases the filling material shall be thoroughly tamped. Puddling the backfill will not be permitted, except with written approval of the Engineer.
Soil compaction shall be controlled during construction in order to provide minimum percentage of density specified for each area classification.

Percentage of Maximum Density Requirements: Compact soil to not less than the following percentages of maximum dry density for soils which exhibit a well-defined moisture density relationship (determined in accordance with ASTM D1557) and to not less than the following percentages of relative dry density (determined in accordance with ASTM D2049) for soils which do not exhibit a well-defined moisture-density relationship.

1. Manholes and Catchbasins: Compact disturbed subgrade and each layer of base material 93% maximum dry density or 90% relative dry density.

2. Lawn or Unpaved Areas: Compact each layer backfill or fill material to 90% maximum dry density.

3. Pavements: Compact subgrade and each layer of fill subbase material, and base material to 95% maximum dry density or 90% relative dry density.

4. Pipe Trenches: Compact bedding material and each layer of backfill to six (6) inches over the pipe to 90% maximum dry density or 90% relative dry density.

3.05 Manholes: All drop manholes shall be installed on undisturbed earth or with a 2 feet thick layer of crushed stone under the base. Manholes shall be built to the lines, grades, dimensions and design shown on the plans as directed with the necessary frames, gratings, covers, hoods, etc., and in accordance with these specifications.

Drainage structures are to be constructed of precast units. Where step rungs are required they shall be cast into units. Construct joints in tongue and groove precast units with a rubber gasket, properly seated when assembled to form a uniformly watertight joint. Metal fittings for catch basins and manholes shall be set in full mortar beds or otherwise secured as shown on the plans.

Inlet and outlet pipes shall extend through the walls for a sufficient distance beyond the outside surface to allow for satisfactory connections, and the concrete or masonry shall be constructed around them neatly to prevent leakage along their outer surfaces. Manholes shall be watertight. The pipe shall be cut flush with the inside face of the wall, or as shown on the plans.
Frame castings for manholes shall be set in full mortar beds true to the lines and grades as directed.

Set frames and covers to match the surrounding slope gradient up to one-on-three.

Where directed the castings shall be temporarily set at such grades as to provide drainage during the construction.

The final setting of all other castings shall be performed at the proper stage of construction as directed.

Cement concrete collars shall be placed around the castings after the final setting as shown on the plans and as directed.

3.06 Headwalls: All headwalls shall be constructed in accordance with the plans and Section 901, Cement Concrete Masonry of the Mass. DPW Standard Specifications for Highways and Bridges, 1988 as amended.

All concrete shall be Class A with a 28 day minimum compressive strength of 3,000 psi.

3.07 Soil Testing During Construction: Allow testing service to inspect and approve subgrades and fill layers before further construction work is performed.

Perform field density tests in accordance with ASTM D1556 (sand cone method), ASTM D2167 (rubber balloon method), or ASTM D2922 (nuclear density method) as applicable. Submit test results to the Engineer for review.

1. Manholes and Catchbasins: For each strata of soil on which drainage structures will be placed, perform at least one test to verify required densities. Subsequent verification and approval of each structure subgrade may be based on a visual comparison of each subgrade with related tested strata, when acceptable to Engineer.

PART 4 - COMPENSATION

4.01 The installation of pipe culverts and of pipe drains will be paid for at the contract unit price per lineal foot of pipe installed, excavated, backfilled, compacted and tested, complete in place, including all materials, equipment, tools and labor incidental thereto.

The installation of manholes, catch basin structures will be paid for at the contract unit price each, excavated, constructed, backfilled, tested, complete in place, including all materials,
equipment, tools and labor incidental thereto. Unit price shall include all rims, covers, grates and tops associated with the complete structure.

There will be no measurement for payment for the cost of maintaining natural flows, but the cost thereof shall be included in the contract unit price per linear foot of pipe being installed. Excavation necessary for such work will be considered as incidental to the pipe installation, and the cost shall be included in the contract unit price per linear foot of pipe being installed.

Payment Items:

15" Reinforced Concrete Pipe, Class III Linear Foot
Precast Concrete Manhole/ Each
Leaching Catch Basins
SECTION 209

TURF ESTABLISHMENT

PART 1 - GENERAL

1.01 Description: Turf establishment shall consist of the placing of jute mesh where required, fertilizing, liming, seeding and mulching.

1.02 Quality Assurance: The Contractor shall submit to the Engineer four copies of a seed analysis and certificates for limestone, fertilizer, mulch, mulch adhesive and jute mesh.

PART 2 - MATERIALS

2.01 Ground Agricultural Limestone shall be composed of not less than 85% calcium and magnesium carbonates, equivalent to not less than 50% of calcium and magnesium oxides.

2.02 Commercial fertilizer shall be a complete fertilizer, of which at least 50% of the nitrogen is derived from organic sources, and shall have the following composition by weight:

10% Nitrogen, 6% Phosphoric Acid, 4% Potash

2.03 The following seed formulations shall be used as specified. Seed shall be guaranteed fresh, clean and of the latest crop, as follows:

For all areas:

60% Perennial Ryegrass
30% Creeping Red Fescue
10% New Zealand White Clover

2.04 Mulch shall be straw such as stalks of oats, wheat, rye or other approved crops which are free from noxious weeds.

2.05 Mulch adhesive shall be Curasol manufactured by American Hoescht, Sommerville, N.J.; Aerospray as manufactured by American Cyanamid, Wayne, N.J., or approved equivalent.

2.06 Jute mesh shall be of a uniform open plain weave of undyed and unbleached, non-toxic single jute yarn, of loosely twisted construction. Width of jute mesh shall be 48 inches plus or minus one inch. Weight of jute mesh shall range from 1.80 pounds per running yard (plus or minus 5 percent) to 0.92 pounds per running yard (plus or minus 5 percent).
Staples shall be least No. 8 gauge plain iron wire, "U" shaped, 6 inches long.

PART 3 - CONSTRUCTION METHODS

3.01 Perform seeding operations between March 1 and October 30 of the same year.

Spread limestone at a rate of 120 pounds per 1,000 square feet.

Spread fertilizer at a rate of 20 pounds per 1,000 square feet.

Spread seed at a rate of 5 pounds per 1,000 square feet.

Spread mulch at a rate of 100 pounds per 1,000 square feet.

Apply mulch adhesive at rates recommended by the manufacturer.

3.02 Jute Mesh: Jute mesh shall be placed before seeding and mulching on all newly graded areas of 1:6 slope or steeper.

Place material on topsoil without stretching in close contact with the soil. Bury upslope ends of all rolls, sides of rolls and downslope end of last roll in anchor slot 6 inches deep. Place earth backfill against buried roll ends and sides and firmly tamp. Place staples at all ends and sides of rolls on 12 inch centers. Overlap uphill end of fabric 18 inches over downhill end of next roll and place staples on 12 inch centers. Construct check slots every 50 feet, place fold of mesh 6 inches vertically into ground and tamp soil firmly against fold, place staples on 6 inch centers. Overlap sides of rolls 4 to 6 inches and place staples on 2 foot centers. Place staples down center of each roll on 3 foot centers. After installation of jute mesh it shall be embedded into the surface by tamping or rolling with an approved roller. Terminate mesh on level area.

3.03 Maintenance: The Contractor shall maintain all seeded areas until final acceptance. Final acceptance of seeded areas shall not be given until at least 75% of the area has become well established. Maintenance shall consist of all necessary repairs such as washouts or other reasons which have impaired good growth. Any re-grading, re-fertilizing or re-seeding, as may be directed, shall be done at the Contractor's expense.
PART 4 - COMPENSATION

4.01 Turf Establishment will be paid for at the contract unit price for square yard area accepted. Included in the unit price is the furnishing and placing of jute mesh, seed, lime, fertilizer, mulch, mulch adhesive, and all other materials, equipment, tools and labor incidental to the completion of this section. No additional payment will be made for maintenance repairs but the cost thereof will be included in the unit price.

Payment Item

Turf Establishment Square Yard
SECTION 210
CONTROL STRUCTURES

PART 1 - GENERAL

1.01 Description: Work specified in this section shall consist of furnishing all labor, materials and equipment to construct the timber pipe support braces and the outflow control devices, including all pipes.

1.02 Quality Assurance: Contractor shall submit to the Engineer four copies of certificates of material compliance with this specification.

PART 2 - MATERIAL

2.01 Timber and Lumber: All wood construction shall consist of pressure treated construction grade or better spruce, fir or hemlock framing material free of splits, shakes or detrimental knots. The preservative treatment shall be an oil borne pentachlorophenol or approved alternative.

2.02 Corrugated Metal Pipe and Fittings: All pipe, saddle branch, anti-seep collars, connection bands, fillings and baffle strips shall be galvanized and conform with Section M5.03.0 of the Commonwealth of Massachusetts Department of Public Works Standard Specifications for Highways and Bridges, 1988, as amended.

2.03 Concrete and Reinforcement: Concrete shall have a minimum 28 day compressive strength of 3,000 p.s.i. and conform with Class "A" Cement Concrete as per Section M4.02.00 of the Department Standard Specifications for Highways and Bridges, 1988, as amended. Reinforcement shall conform to ASTM A-615 Grade 60.

2.04 Stop Logs: Stop Logs shall be oak planking free of splits, shakes or detrimental knots. Boards shall be free from warpage or twisting and shall interlock easily without binding. Boards will be shaped as necessary at ends to facilitate placement and removal between the steel channels.

2.05 Steel Channel: Steel shall be rolled section conforming to ASTM A-36.
PART 3 - CONSTRUCTION METHODS

3.01 Formwork: Contractor shall design, erect, support, brace and maintain formwork to support all loads that may be applied before and during the placement of concrete. Construct formwork so concrete footings are of correct size, shape, alignment, elevation and position.

3.02 Placing Reinforcement: Comply with the specified codes and standards, and Concrete Reinforcing Steel Institute’s recommended practice for "Placing Reinforcing Bars", for details and methods of reinforcement placement and supports, and as herein specified.

Clean reinforcement of loose rust and mill scale, earth, ice, and other materials which reduce or destroy bond with concrete.

Accurately position, support and secure reinforcement against displacement by formwork, construction, or concrete placement operations. Locate and support reinforcing by metal chairs, runners, bolsters, spacers and hangers, as required.

3.03 Installation of Embedded Items: Set and build into the work anchorage devices and other embedded items required for other work that is attached to, or supported by, cast-in-place concrete. Use setting drawings, diagrams, instructions and directions provided by suppliers of the items to be attached thereto.

3.04 Concrete Work: All placing, consolidating, finishing, curing and protecting of concrete shall conform with Section 901, Cement Concrete Masonry of the Commonwealth of Massachusetts Department of Public Works Standard Specifications for Highways and Bridges, 1988, as amended.

3.05 Timber Work: Loading, transporting, unloading, and piling of timber or lumber shall be conducted so that it is kept clean and free from injury. Lumber and timber shall be stored in piles at the site of the work. It shall be protected from the weather by suitable covering when directed. Treated material shall be close-stacked, piled to prevent warping. All timber shall be carefully handled. Treated timber shall be so handled that there is no breaking of outer fibers or penetrating of the surfaces with tools. Treated timber shall be handled with rope slings without using cant hooks or similar appliances.

All framing shall be true and exact and constructed in compliance with the plans as shown or as ordered by the Engineer. Nails and spikes shall be driven to set the heads flush with the surface of the wood unless otherwise directed.

All lumber and timber shall be accurately cut and framed for a close fit with joints bearing evenly over the entire contact
surfaces. Mortises shall be true size for their full depths with tenons fitted snugly. Shimming of joints will not be permitted and open joints will not be accepted.

All abrasions in treated timber shall be treated with two applications of preservative.

3.06 Corrugated Metal Pipe Work: All work associated with the corrugated metal standpipe and outflow culvert shall be performed in conformance with the Commonwealth of Massachusetts standard Specifications for Culverts, Storm Drains and Sewer Pipes, Highways and Bridges, 1988, as amended. The standpipe shall be shop fabricated as shown on the plans with the channels continuously welded to the pipe in accordance with the AWS Code. Baffle strips shall be welded in outlet pipe as shown on the plans and in conformance with AWS Code. Weld must form watertight connection. After welding, channel and weld area will be coated with a cold applied galvanizing compound in conformance with manufacturer’s recommendations.

PART 4 - COMPENSATION

4.01 Control Structures will be paid for at the contract unit price for each type of structure, complete and accepted. Included in the unit price is all excavation, backfilling formwork, materials, equipment, tools and labor incidental thereto.

Payment Item

Timber Pipe Support Brace Each
Outflow Control Device Each
SECTION 300

HYDRAULIC DREDGING OF
WALKER POND

PART 1 - GENERAL

1.01 Description: The dredging work shall include mobilization, removal, and all remobilization of equipment and pipelines for up to three dredging seasons; transporting of dredged materials to the spoil containment area; operation and maintenance of the spoil area during the dredging work, but excluding any grading or restoration of the spoil area after completion of the dredging work; and hydraulic dredging of Walker Pond to the grades shown on the Contract plans.

1.02 Submittals: Survey - The areas to be dredged will be surveyed by a Land Surveyor licensed in Massachusetts, approved in writing by the Engineer, both "before" and "after" dredging. Cross sections of the dredging area drawn at 100 feet intervals shall be provided at a scale not to exceed 20 feet equals 1 inch horizontal and 2 feet equals 1 inch vertical and with a vertical accuracy of 0.5 feet. Refer to Control of Work Specification. "Before" sections are to be submitted to the Engineer prior to dredging initiation for review and acceptance.

PART 2 - MATERIALS

Not Applicable

PART 3 - CONSTRUCTION METHODS

3.01 Type of Equipment: Dredging will be accomplished by the use of a hydraulic dredge of suitable size and power to complete the work in the time periods specified. It shall be equipped with a cutter-head designed to minimize turbidity in the dredging area. If dredge creates turbidity in excess of 50 ntu in excess of 100 feet from machine, all operations shall cease until levels of turbidity are lower than 50 ntu's and the cause of the excessive turbidity is corrected by contractor. The dredge will be capable of dredging to the depths required. To meet the environmental design criteria of the spoil containment area the pump output will not exceed 2,000 g.p.m. at an average solid ratio of 12-15%. The power plant shall be equipped with noise suppression mufflers to minimize noise.

Due to distance and hydraulic head loss, Contractor may utilize a booster pump(s) along the pipeline. Booster must be compatible with the dredge and also equipped with noise suppression mufflers to minimize noise. Dredge not to exceed 70 dBA, 100 feet from dredge. If noise is in excess of this level, all operations are to cease until noise level brought into compliance by Contractor. Location of booster pump(s) shall be such as to minimize disturbance with abutters to Lake. Location shall be subject to Engineer's review and will be modified if requested.
All cables, equipment, pipes, etc. to be clearly marked (i.e., safety flags, buoys, etc.) for safety purposes. Work areas and areas for machinery shall be cordoned off.

Contractor will be given access to the Lake at the Walker Pond south beach area and at the Town Boat Launch area in the north cove. Contractor shall be allowed to construct temporary access docks at both sites, as necessary to do the work. Refueling of dredge to conform with Local, State and Federal guidelines and policies.

3.02 Spoil Placement: The spoil shall be continuously piped from the dredge to the containment area through watertight pipelines. The discharge location into the containment area will be moved as ordered by the Engineer to maximize the capacity of the area. The return flow of decanted water from the containment area will be controlled by adjustment of the overflow weir to prevent return of suspended materials in excess of the limits established.

3.03 Spoil Containment Area Maintenance and Operation

The Contractor will be responsible for the maintenance and operation of the containment area during the entire dredging program.

During the initial dredging operations, Engineer will sample and test containment basin supernatant to determine flocculant requirements and metering equipment to provide effluent standards as specified. Contractor shall order flocculant and equipment as specified by the Engineer, install and monitor the application over the life of the project. Contractor will provide complete coordination and cooperate in all manners to assist with the flocculant installation and application and monitoring. Contractor will pay in full for all flocculant and equipment provided within ten days of receipt of payment by the Owner for services provided.

Operation of the containment area will include purchase, storage according to manufacturers recommendations, preparation and application of liquid flocculants to the outflow discharge of the containment area; along with operation of the outflow weirs on both the containment area and flocculation basin in order to meet effluent water quality standards. A power source may be required for the operation of the flocculation meter system. The Contractor will be responsible for safety and security at the containment area during the entire dredging program.

Turbidity from flocculation basin return water shall not exceed 10 ntu, at point of re-entry into the Lake system as a daily average. The turbidity shall be monitored by the Engineer or his representative during the dredging activities. Should this limit be exceeded, dredging shall be discontinued until discharge comes into compliance. The Contractor will not be paid for lost work time due to non-compliance with turbidity requirements.
If the containment area does not have sufficient capacity for the total volume of dredged materials, then a portion of the dredged materials will either be regraded or removed by the Contractor during the period between dredging seasons (see Specifications Section 400. Any repairs to the dikes necessitated by such work will be undertaken by, and at the expense of the Contractor.

3.04 Time of Work: The project is designed to be accomplished during two dredging seasons, i.e. April 15 - November 1, 1991 and April 15 - November 1, 1992. A third dredging season, if required to complete the dredging, will be undertaken by the Contractor beginning April 15, 1993, but no additional cost for mobilization will be recognized nor will the unit contract price be adjusted. The sequence of dredging shall be the following as shown on the index plan of the Dredging Plans; 1) north cove at the public boat launch, 2) the west side of the Lake at the Wells State Park Beach and, 3) the east side of the Lake just beyond the Walker Pond Association south beach. Variations in dredge sequence shall be allowed, if changes are received and accepted by Engineer.

Work under this Section may be prosecuted 7:00 a.m. to Sunset, six days per week at the Contractor's option (excludes Sundays), but the total discharge into the containment area cannot exceed 1,200,000 gallons during any consecutive 24 hours. Hours may be modified with acceptance by Wells State Park, Walker Pond Association and the Engineer.

PART 4 - COMPENSATION

4.01 Work Covered by Contract Price: The dredging work shall include mobilization, removal, and remobilization of equipment and pipelines; transporting of dredged materials to the spoil containment area including any booster pump(s); operation and maintenance of the containment area during the dredging work; excluding any grading or restoration of the spoil area after completion of the dredging work; and hydraulic dredging to the grades shown on the plans. Removal of natural objects not possible by the type of hydraulic dredge required by the specifications, such as rocks, sunken logs, or hardpan shall not be required. Human debris encountered will be removed and disposed of in accordance with local and state law at no additional cost.

4.02 Overdepth: The dredging shall be performed in a manner that, upon completion, the elevations and contours will be in accordance with the contract drawings. The plans establish a control bench mark(s) which shall be the sole datum for the work. The Contractor may elect to overdredge to compensate for any inaccuracies, but it is understood that any dredging beyond or below the grades and contours shown on the plans will not be compensated.
4.03 Measurement and Payment: It is the intent to excavate and remove materials by hydraulic dredging to the grades and contours shown on the contract plans.

The estimated quantity of 135,000 cubic yards in-situ is approximate only and the exact quantities must be verified by the Contractor by survey. The owner reserves the right to increase or decrease the quantity of the work by 25% without altering the price bid per cubic yard in order that the quantity of work to be done is consistent with the funds available for the project.

Payment for hydraulic dredging will be made at the unit price bid per cubic yard as determined by utilizing the cross sections of the dredging area 100 feet intervals "before" and "after" dredging (see Section 1.02 Submittals). The volume of the removed materials will be computed by the method of "Average End Areas". The cross sections furnished in bid documents serve as approximations only; actual before and after conditions must be verified by survey.

Monthly, the Contractor will provide surveyed sections of the portion of the dredging area excavated to the grades and contours shown on the plans. Payment will be made for the actual volume removed to the required grades. Payment for each section completed, will constitute acceptance of the work as complete, and the Contractor will not be required to perform subsequent dredging in such area to remove any materials subsequently deposited in the area by causes beyond his/her control.

Payment for flocculant and metering equipment will be basin upon the actual invoiced cost, plus ten percent, which cost shall include all materials, equipment, tools and labor incidental thereto, up to the specified allowance unless otherwise directed by the Engineer. Invoice will include copies of all invoices.

Payments Items:

- Hydraulic Dredging
- Flocculant

Cubic Yard
Up to Allowance Amount
SECTION 400
CONTAINMENT AREA REGRADING

PART 1 - GENERAL

1.01 Description: Work in this section shall consist of preparing the sedimentation and flocculation basins for the next dredging season by regrading the sediment deposited during the prior dredging season. This section does not apply after the final dredging season.

1.02 Submittals: The area to be graded within the pool level of the basins will be surveyed by a Land Surveyor licensed in Massachusetts, approved in writing by the Engineer, both "before" and "after" sediment regrading. "Before" sections will be submitted to the Engineer prior to sediment regrading and after the underdrain system is opened. Cross sections of the basins shall be provided at 50 feet intervals and drawn at a scale not to exceed 20 feet equals 1 inch horizontal and 2 feet equals 1 inch vertical and with a vertical accuracy of 0.5 feet.

PART 2 - MATERIALS

Not Applicable

PART 3 - CONSTRUCTION METHODS

3.01 Time of Work: The grading work shall be initiated any time after the close of a dredging season as defined in Part 3.04 of Section 300 - Hydraulic Dredging of Walker Pond and must be completed prior to the next dredging season.

3.02 Grading: After survey cross sections are taken and reviewed by the Engineer, sediment material is to be removed from within the maximum pool level shown on the plans to provide adequate volume capacity for the remaining dredging volume. Material will be placed outside the pool level but within the horizontal grading limits shown for disposal on the plans. This area is generally located on the west side of the sedimentation basin and at the prior borrow pit along the park entrance roadway. Grading will generally conform to the grading indicated on the plans but may be higher if approved by the Engineer, as necessary. Placement of sediment below the maximum pool level will also be allowed if approved by the Engineer, as necessary. Over excavation within the pool may be authorized by the Engineer to compensate the lost storage volume.

Slopes are to be free draining and stable and drainage is to be directed to the containment basin. Slopes are to be seeded and
maintained to prevent erosion as specified in part 3.02 of Section 201, Soil Erosion Control, for the temporary area west of the sedimentation basin and turf established as specified in Section 209, Turf Establishment, for the disposal area along the park entrance roadway.

Chain link fencing may need to be removed, adjusted, and/or reset during the regrading, but if so, it will be for the convenience of the contractor and will not be compensated. Control structures are to be removed and disposed of by the Contractor off-site. The CMP may be plugged with concrete or filled with sand and abandoned in place.

PART 4 - COMPENSATION

4.01 Measurement: After regrading is complete, area within the pool level will be surveyed in accordance with part 1.02 of this specification at the same location as the prior sections and the volume of material regraded computed. Over excavation will not be accepted unless previously authorized by the Engineer in writing.

4.02 Payment: All work under this item shall be paid for at the contract unit price per cubic yard of sediment removed below the maximum pool level and regraded, complete in place. Price shall include all materials equipment, tools, excavation, hauling, backfill, grading, seeding, erosion control and labor incidental thereto. Survey services will be paid for in accordance with Section 101, Control of Work. No separate payment will be made for chain link fence moving nor the temporary seeding or slope stabilization, but such work shall be considered as included in the unit price. Turf Establishment will be paid for in accordance with Section 209, Turf Establishment for the disposal area along the park entrance roadway.

Payment Item

Containment Area Regrading Cubic Yard
SECTION 401
CONTAINMENT AREA RESTORATION

PART 1 - GENERAL

1.01 Description: Work under this item will consist of restoring the containment area and access roads in accordance with the details and sequence in the restoration plans after all hydraulic dredging is complete.

PART 2 - MATERIALS

2.01 Topsoil: See Part 2.02 of Section 203, Embankment Formation.

PART 3 - CONSTRUCTION METHODS

3.01 At the completion of the hydraulic dredging program, cross sections will be prepared by the land surveyor within the limits of the containment basins and those areas previously graded with sediment. Sections will be drawn at a scale not to exceed 20 feet equals 1 inch horizontal and 2 feet equals 1 inch vertical and with a vertical accuracy of 0.5 feet and submitted to the Engineer for review prior to initiation of any work under this item.

3.02 The Engineer may adjust the grading of the restoration plan as necessary based upon the actual quantity of sediment with the basin area. Such adjustments will be issued to the Contractor within 60 days after receipt of all survey information. Engineering adjustments will not be considered just reason to alter the bid unit prices within this item.

3.03 Chain link fencing will be removed and delivered to a site within the Town of Sturbridge as designated by the Owner or his designated representative.

Damaged fencing or any other material identified by the Owner or his designated representative will become the property of the Contractor and will be removed and disposed of off-site by the Contractor. No additional payment will be made for such work but will be included in the bid unit prices.

3.04 All areas to be graded shall be cleared, grubbed and stripped of topsoil in accordance with Section 202; Site Clearing, Grubbing and Topsoil Removal. Placement of fill shall be in accordance with part 3.05 of Section 203; Embankment Formation and will proceed in a manner that will blend the sand and gravel embankments with the sediment materials being graded.
3.05 At the completion of all grading, the same cross sections will again be taken as identified in Part 3.01 and submitted to the Engineer.

3.06 Topsoil will be placed after all grading of sediment is complete within the restoration area. The access drive to the Flocculation Basin will remain. Procedures will conform to Part 3.08 of Section 203 Embankment Formation. Stockpiled on-site topsoil will be utilized in total. If the volume of topsoil is insufficient for the total project, the Engineer may authorize the hauling of topsoil from an approved source.

PART 4 - COMPENSATION

4.01 Containment Area Restoration Grading will be measured for payment by the actual cubic yards of sediment graded as determined by the survey cross section. The approved land surveyor will submit volume computations to the Engineer for review. Grading not necessary to meet the final restoration plan will not be included for payment. Included in this pay item are all tasks delineated in the restoration plan and along the access roads unless specifically identified for separate payment in this section and include all materials, equipment tools, and labor incidental thereto.

4.02 On-site previously stripped topsoil shall be placed on the regraded sediment as shown on the plans and as directed by the Engineer but will not be measured for payment. The cost associated with placement of topsoil will be included in the basin restoration grading unit price.

4.03 Topsoil Borrow brought onto site and placed will be measured and paid for complete in place and accepted per cubic yard.

4.04 Turf Establishment will be paid for at the bid contract unit price per square yard.

Payment Item:

Containment Area Restoration Grading Cubic Yard
L. MINIMUM WAGE RATES, MA. DEPT. OF LABOR
M. ORDER OF CONDITIONS, MA. WETLANDS PROTECTION ACT
Order of Conditions
Massachusetts Wetlands Protection Act
G.L. c. 131, §40

From _____________________________
STURBRIDGE CONSERVATION COMMISSION

To _____________________________
Town of Sturbridge
P.O. Box 227, Town Hall
Sturbridge, MA 01566

Commonwealth of Massachusetts - DEM
Wells State Park, PO Box 602
Sturbridge, MA 01566

This Order is issued and delivered as follows:

☐ by hand delivery to applicant or representative on January 17, 1990 (date)
☐ by certified mail, return receipt requested on ___________________________ (date)

This project is located at Walker Pond Restoration Project

The property is recorded at the Registry of n/a
Book _____________________________ Page _____________________________

Certificate (if registered) _____________________________

The Notice of Intent for this project was filed on November 15, 1989 (date)

The public hearing was closed on December 20, 1989 (date)

Findings

The Commission has reviewed the above-referenced Notice of Intent and plans and has held a public hearing on the project. Based on the information available to the Commission at this time, the Commission has determined that the area on which the proposed work is to be done is significant to the following interests in accordance with the Presumptions of Significance set forth in the regulations for each Area Subject to Protection Under the Act (check as appropriate):

☐ Public water supply ☐ Flood control ☐ Land containing shellfish
☐ Private water supply ☐ Storm damage prevention ☐ Fisheries
☐ Ground water supply ☐ Prevention of pollution ☐ Protection of wildlife habitat

Total Filing Fee Submitted n/a
City/Town Portion $ (½ fee in excess of $25)
State Portion $ (½ total)

Total Refund Due $ _____________________________
City/Town Portion $ _____________________________
State Portion $ _____________________________

Effective 11/10/89
Therefore, the __________ Commission ________ hereby finds that the following conditions are necessary, in accordance with the Performance Standards set forth in the regulations, to protect those interests checked above. The __________ Commission ________ orders that all work shall be performed in accordance with said conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications or other proposals submitted with the Notice of Intent, the conditions shall control.

General Conditions

1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.

2. This Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.

3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state or local statutes, ordinances, by-laws or regulations.

4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
   (a) the work is a maintenance dredging project as provided for in the Act; or
   (b) the time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance and both that date and the special circumstances warranting the extended time period are set forth in this Order.

5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order.

6. Any fill used in connection with this project shall be clean fill, containing no trash, refuse, rubbish or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles or parts of any of the foregoing.

7. No work shall be undertaken until all administrative appeal periods from this Order have elapsed or, if such an appeal has been filed, until all proceedings before the Department have been completed.

8. No work shall be undertaken until the Final Order has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry’s Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is to be done. The recording information shall be submitted to the Commission on the form at the end of this Order prior to commencement of the work.

9. A sign shall be displayed at the site not less than two square feet or more than three square feet in size bearing the words, “Massachusetts Department of Environmental Protection, File Number ________ 300-200 ________

10. Where the Department of Environmental Protection is requested to make a determination and to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before the Department.

11. Upon completion of the work described herein, the applicant shall forthwith request in writing that a Certificate of Compliance be issued stating that the work has been satisfactorily completed.

12. The work shall conform to the following plans and special conditions:
NOTE: All Special Conditions are made in addition to the General Conditions listed on Page 5-2 of this Order.

Special Conditions, numbered 1 - 7, are listed on attached Page 5-3B.
ORDER OF CONDITIONS

MASSACHUSETTS WETLANDS PROTECTION ACT

DEP FILE NO. #300-200

TOWN OF STURBRIDGE

APPLICANT: Town of sturbridge
Location: Walker Pond Restoration

SPECIAL CONDITIONS

1. Work shall be done in accordance with the plans and reports submitted by Baystate Environmental Consultants, Inc. listed on Page 5-3A of this Order.

2. The Conservation Commission shall be provided updated plans when they become available.

3. Original plans presented become part of the application. Any changes in the application will require notification and approval in writing of the Conservation Commission and may require a new wetlands application and hearing.

4. The Conservation Commission and its designated representatives shall have access to the property during all phases of work to insure compliance with this Order of Conditions.

5. The Conservation Commission reserves the right to require additional erosion or storm damage prevention controls if deemed necessary.

6. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state or local statutes, ordinances, by-laws or regulations.

7. The applicant shall indemnify and save harmless the Commonwealth and Sturbridge Conservation Commission against all suits, claims, or liability of every name and nature arising at any time out of or in consequence of the acts of the Sturbridge Conservation Commission in the performance of the work covered by this permit and/or failure to comply with the terms and conditions of this permit whether by itself or its employees or subcontractors.

END OF SPECIAL CONDITIONS
Issued By: STURBRIDGE Conservation Commission

Signature(s):
John R. Hoffman, Chairman
David [signature]
E.T. Goodwin

This Order must be signed by a majority of the Conservation Commission.

On this 10th day of January 1990, before me personally appeared John R. Hoffman, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he/she executed the same as his/her free act and deed.

Sue J. Blair
My commission expires

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land upon which the proposed work is to be done, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the Department of Environmental Protection to issue a Superseding Order, providing the request is made by certified mail or hand delivery to the Department, with the appropriate filing fee and Fee Transmittal Form as provided in 310 CMR 10.03(7), within ten days from the date of issuance of this Determination. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and the applicant.

cc:
Commonwealth of Mass. - DEM
Baystate Env.
DEP - Wetlands Div.
File

Detach on dotted line and submit to the prior to commencement of work.

To ____________________________________________ Issuing Authority

Please be advised that the Order of Conditions for the project at _____________________________ has been recorded at the Registry of ____________________________________________ and has been noted in the chain of title of the affected property in accordance with General Condition 8 on ____________________________ 19___.

If recorded land, the instrument number which identifies this transaction is ____________________________

If registered land, the document number which identifies this transaction is ____________________________

Signature ______________________________________ applicant
N. WATER QUALITY CERTIFICATION, MDEP
0. NATIONWIDE PERMIT
DEPARTMENT OF THE ARMY
NEW ENGLAND DIVISION, CORPS OF ENGINEERS
424 TRAPELO ROAD
WALTHAM, MASSACHUSETTS 02254-9149

February 20, 1990

Regulatory Branch
CENED-OD-R-07-90-0060

Mr. Kenneth J. Wagner, Ph.D.
Baystate Environmental Consultants
296 North Main Street
East Longmeadow, MA 01028

Dear Mr. Wagner:

We have reviewed your application to dredge a 20 acre site within Walker Pond in Wells State Park, Sturbridge, MA. Approximately 130,000 c.y. of predominantly organic muck will be hydraulically dredged and contained in an onsite gravel pit for dewatering. Runoff from the containment area will return to Walker Pond. No fill will be placed in wetlands adjacent to the pond or the containment site.

That work, as shown on your plans entitled "Walker Pond Restoration Project" in 8 Sheets may be permitted under our Nationwide permit found at Title 33 Code of Federal Regulations Part 330.5(a) 16 published in the November 13, 1986 Federal Register provided that the work is done in accordance with all of the attached conditions. However, the State of Massachusetts has denied the certification for this permit; hence, we have procedurally denied the permit. Therefore, before you can start construction you must obtain and submit to this office a copy of a water quality certificate from the State.

Once we receive a copy of the certification(s) required above you may proceed without further action by this office unless otherwise notified that the Division Engineer has taken discretionary authority to require an individual permit. Any conditions placed on the water quality certification are added as conditions of this permit.

Please note that the attached conditions require the use of practical alternatives to avoid or minimize the discharge of dredged or fill material into waters and wetlands of the United States. Further, any temporary fill, such as roadways or cofferdams, etc., placed in the waterway or wetlands to facilitate construction of this activity may require an individual permit.

This verification, that the work shown on your plans is permitted by the nationwide permit, is valid until such time as the nationwide permit is modified, reissued, or revoked. All of the nationwide permits are scheduled for modification, reissuance or revocation prior to January 13, 1992. You are responsible for remaining informed of such changes. We will issue a public notice announcing the changes when they occur. If you start or are under contract to start this work before the date the nationwide permit is modified or revoked, you will have 12 months from the date of the modification or revocation to complete the work under the present terms and conditions of this nationwide permit.

Before you begin work you must obtain any necessary state and/or local permits, and any other necessary federal permits.

Should you have any questions concerning this matter, please contact Ted Lento at 617-647-8688.

Sincerely,

Karen Kirk Adams
Chief, Permits Section
Regulatory Branch
February 12, 1990

Regulatory Branch
CENED-OD-R-07-90-0060

Mr. Kenneth J. Wagner, Ph.D.
Baystate Environmental Consultants
296 North Main Street
East Longmeadow, MA 01028

Dear Mr. Wagner:

We have reviewed your application to dredge a 20 acre site within Walker Pond in Wells State Park, Sturbridge MA. Approximately 130,000 c.y. of predominantly organic muck will be hydraulically dredged and contained in an onsite gravel pit for dewatering. No fill will be placed in wetlands adjacent to the pond or the containment site.

That work, as shown on your plans entitled "Walker Pond Restoration Project" in 8 Sheets may be permitted under our Nationwide permit found at Title 33 Code of Federal Regulations Part 330.5(a) 16 published in the November 13, 1986 Federal Register provided that the work is done in accordance with all of the attached conditions. However, the State of Massachusetts has denied the certification for this permit; hence, we have procedurally denied the permit. Therefore, before you can start construction you must obtain and submit to this office a copy of a water quality certificate from the State.

Once we receive a copy of the certification(s) required above you may proceed without further action by this office unless otherwise notified that the Division Engineer has taken discretionary authority to require an individual permit. Any conditions placed on the water quality certification are added as conditions of this permit.

Failure to obtain the required certification(s) cited above, or to comply with all of the conditions, including those placed on a water quality certification, is a violation of Federal law and may subject you to civil or criminal liability; fines can be as high as $10,000 or $25,000 per day of violation.

Please note that the attached conditions require the use of practical alternatives to avoid or minimize the discharge of dredged or fill material into waters and wetlands of the United States. Further, any temporary fill, such as roadways or cofferdams, etc., placed in the waterway or wetlands to facilitate construction of this activity may require an individual permit.

Should you have any questions concerning this matter, please contact Ted Lento at 617-647-8688.

Sincerely,

Karen Kirk Adams
Section Chief
Regulatory Branch
NATIONWIDE PERMIT CONDITIONS
(Applicable to all states)

Section 330.5(b) Conditions. The following special conditions must be followed in order for the nationwide permits identified to be valid:

(1) That any discharge of dredged or fill material will not occur in the proximity of a public water supply intake;

(2) That any discharge of dredged or fill material will not occur in areas of concentrated shellfish production unless the discharge is directly related to a shellfish harvesting activity authorized by paragraph (a)(4) of this section;

(3) That the activity will not jeopardize a threatened or endangered species as identified under the Endangered Species Act (ESA), or destroy or adversely modify the critical habitat of such species. In the case of federal agencies, it is the agencies' responsibility to comply with the requirements of the ESA. If the activity may adversely affect any listed species or critical habitat, the district engineer must initiate Section 7 consultation in accordance with the ESA. In such cases, the district engineer may: (i) initiate Section 7 consultation and then, upon completion, authorize the activity under the nationwide permit by adding, if appropriate, activity specific conditions, or (ii) prior to or concurrent with Section 7 consultation he may recommend discretionary authority (See Section 330.8) or use modification, suspension, or revocation procedures (See 33 CFR 325.7);

(4) That the activity shall not significantly disrupt the movement of aquatic life indigenous to the waterbody (unless the primary purpose of the fill is to impound water);

(5) That any discharge of dredged or fill material shall consist of suitable material free from toxic pollutants (see Section 307 of Clean Water Act) in toxic amounts;

(6) That any structure of fill authorized shall be properly maintained;

(7) That the activity will not occur in a component of the National Wild and Scenic River System; nor in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in a official study status;

(8) That the activity shall not cause an unacceptable interference with navigation;

(9) That, if the activity may adversely affect historic properties which the National Park Service has listed on, or determined eligible for listing on, the National Register of Historic Places, the permittee will notify the district engineer. If the district engineer determines that such historic properties may be adversely affected, he will provide the Advisory Council on Historic Preservation an opportunity to comment on the effects on such historic properties or he will consider modification, suspension, or revocation in accordance with 33 CFR 325.7. Furthermore, if the permittee before or during prosecution of the work authorized, encounters a historic property that has not been listed or determined eligible for listing on the National Register, but which may be eligible for listing in the National Register, he shall immediately notify the district engineer;
(10) That the construction or operation of the activity will not impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights;

(11) That in certain states, an individual state water quality certification must be obtained or waived (See Section 330.9);

(12) That in certain states, an individual state coastal zone management consistency concurrence must be obtained or waived (See Section 330.10);

(13) That the activity will comply with regional conditions which may have been added by the division engineer (See Section 330.8(a)); and

(14) That the management practices listed in 330.6 of this part shall be followed to the maximum extent practicable.

Section 330.5(c) Further information.

(1) District engineers are authorized to determine if an activity complies with the terms and conditions of a nationwide permit unless that decision must be made by the division engineer in accordance with Section 330.7.

(2) Nationwide permits do not obviate the need to obtain other Federal, state or local authorizations required by law.

(3) Nationwide permits do not grant any property rights or exclusive privileges.

(4) Nationwide permits do not authorize any injury to property or rights of others.

(5) Nationwide permits do not authorize interference with any existing or proposed Federal project.

Section 330.5(d) Modification, Suspension or Revocation of Nationwide Permits. The Chief of Engineers may modify, suspend or revoke nationwide permits in accordance with the relevant procedures of 33 CFR 325.7. Such authority includes, but is not limited to: adding individual, regional or nationwide conditions; revoking authorization for a category of activities or a category of waters by requiring individual or regional permits; or revoking an authorization on a case-by-case basis. This authority is not limited to concerns for the aquatic environment as is the discretionary authority in Section 330.8.
Section 330.6 Management Practices.

(a) In addition to the conditions specified in Sections 330.5 of this Part, the following management practices shall be followed, to the maximum extent practicable, in order to minimize the adverse effects of these discharges on the aquatic environment. Failure to comply with these practices may be cause for the district engineer to recommend, or the division engineer to take, discretionary authority to regulate the activity on an individual or regional basis pursuant to Section 330.8 of this Part.

(1) Discharges of dredged or fill material into waters of the United States shall be avoided or minimized through the use of other practicable alternatives;

(2) Discharges in spawning areas during spawning seasons shall be avoided.

(3) Discharges shall not restrict or impede the movement of aquatic species indigenous to the waters or the passage of normal or expected high flows or cause the relocation of the water (unless the primary purpose of the fill is to impound waters).

(4) If the discharge creates an impoundment of water, adverse impacts on the aquatic system caused by the accelerated passage of water and/or the restriction of its flow shall be minimized.

(5) Discharges in wetland areas shall be avoided.

(6) Heavy equipment working in wetlands shall be placed on mats.

(7) Discharges into breeding areas for migratory waterfowl shall be avoided.

(8) All temporary fills shall be removed in their entirety.
APPENDIX I

REGIONAL CONDITIONS ON NATIONWIDE PERMITS IN MASSACHUSETTS

Nationwide permits 3, 13, 14, 15, 18, 19, 23, and 26 may be used in Massachusetts for projects of the Massachusetts Department of Public Works (MDPW) only, but shall not be valid until MDPW has complied with the following regional conditions:

1. The MDPW will mail a copy of the joint local/federal Notice of Intent or another appropriate notice, and additional information as required, to the Massachusetts Coastal Zone Management (MCZM) Office and the Division of Water Pollution Control (DWPC) for each project within the coastal zone of Massachusetts, and to the DWPC for every other project, for their respective federal consistency and water quality certificate reviews as appropriate to their geographic and subject matter jurisdiction.

2. The MDPW will comply with, and the nationwide permit will incorporate by reference any Water Quality Certification Conditions placed on it by the DWPC.

3. The nationwide permit will not be valid for projects subject to state environmental impact review until such review is concluded.

4. The Division Engineer of the New England Division of the U.S. Army Corps of Engineers will require an individual permit for a specific project upon request by the DEQE or the MCZM office.

5. The MCZM consistency agreement and the DWPC 401 Water Quality Certification of Nationwide Permits at 33 CER 330.5 (a) (3), (13), (14), (15), (18), (19), (23), and (26) shall be reviewed during the course of the year following its issuance and shall remain in force, be modified, or be terminated at the end of said year upon recommendation of the Executive Office of Environmental Affairs and Division of Water Pollution Control.

Pursuant to conditions 1, 2, and 4, the Division reserves the right to impose additional conditions on individual projects, by issuing Revised Water Quality Certification for such projects where warranted by our review. Such action by the Division may include requiring that an individual permit, with full federal agency review, be processed by the Corps of Engineers, and/or project-specific conditions governing the work itself.

This Certification is limited to projects proposed by the Massachusetts Department of Public Works pursuant to nationwide permits 3, 13, 14, 15, 18, 19, 23, and 26. These permits are not available for use by any other applicant. The Division has previously denied Certification for nationwide permits 2, 3, 7, 8, 9, 12, 13, 14, 15, 16, 17, 18, 19, 21, 23, 24, and 26. Except as explicitly modified in this Certification, that denial remains in effect.
NATIONWIDE PERMITS GRANTED CONDITION 401 (WATER QUALITY) CERTIFICATION

The Massachusetts Division of Water Pollution Control has certified in accordance with Section 401 of the Federal Water Pollution Control Act that activities authorized by Nationwide Permits 3, 12, and 13 can reasonably be conducted in such a manner that water quality standards will not be violated, provided that:

Nationwide Permit 3

a) a final order of conditions (Ch.131 S40) has been issued for the proposed work;

b) the proposed work does not exceed MEPA (Massachusetts Environmental Policy Act) thresholds concerning waters or wetland resources;

c) no work is conducted in marine or estuarine waters;

d) creosote-treated wood is not used;

e) the proponent is not the Massachusetts Department of Public Works, (whose use of nationwide permits is covered by a separate document and process).

Nationwide Permit 12

1) The work involves no crossings of perennial streams (individual water quality certification is required).

2) The total wetland altered and restored shall not exceed 1 acre in any town.

3) No fill shall be placed in any salt marsh, estuary, or marine waters.

4) No temporary fill shall be placed in any wetland.

5) Wetland soils shall be removed, stored in an adjacent upland area and restored at the same grade and location as existed prior to construction.

6) Where otherwise the effect of the utility line fill would be to drain the wetland, impervious material such as bentonite shall be used to prevent such drainage.

7) A final order of condition (Ch.131 S40) has been obtained for the proposed work.
1) Written concurrence with the planned work shall be obtained from the Massachusetts Division of Fisheries and Wildlife.

2) Stream cross section in the project area shall not be diminished by the placement of stabilization material from the natural dimension existing prior to construction, nor shall the elevation of the stream bank be increased.

3) No shoal removal or channel alteration is authorized (individual Water Quality Certification is required).

4) No work shall occur in marine or estuarine waters.

5) A final order of condition (Ch. 131 §40) has been issued for the proposed work.

Should any violation of the water quality standards or the terms of this certification occur as a result of the proposed activity, the DWPC will direct that the condition be corrected. Non-compliance on the part of the permittee will be cause for the DWPC to recommend the revocation of the permit(s) issued therefor or take such action as is authorized by the General Laws of the Commonwealth. Substantial civil and criminal penalties are authorized under M.G.L. Ch.21, Section 42 for discharging into Massachusetts waters in violation of an order or permit issued by the DWPC.