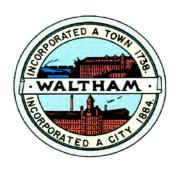
The City of Waltham



Invites Interested Parties To propose the best offer and or bid For the service or product herewith described:

INFIELD RENOVATIONS, Monsignor McCabe Playground and Nipper Maher Park

The bid opening will be held: 10:00 AM on Thursday February 27, 2020

A pre-bid conference: 10:00 AM on Friday February 14, 2020

(Meet at Nipper Maher Park, 65 Dartmouth Road, Waltham, MA 02453)

Last day for written questions: 12 Noon Tuesday February 18, 2020.

(Via email ONLY to jpedulla@city.waltham.ma.us)

TABLE OF CONTENTS

Cover
Table of Contents

DIVISION 00

00 02 00 Notice to Bidders

00 10 00 Instructions to Bidders

00 31 00 Form for General Bid

00 33 10 Prevailing Wages

00 50 00 Agreement

00 50 10 Performance Bond

00 50 20 Payment Bond

00 50 30 General Conditions

00 54 00 Compliance Documents

DIVISION 01

01 01 00 Summary of Work

01 02 50 Measurement and Payment

0 102 80 Change Order

01 04 00 Control of the Work

01 20 00 Project Meetings

01 40 00 Quality Control

01 50 00 Temporary Facilities

01 16 00 Construction Lay out

01 70 00Project Close-out

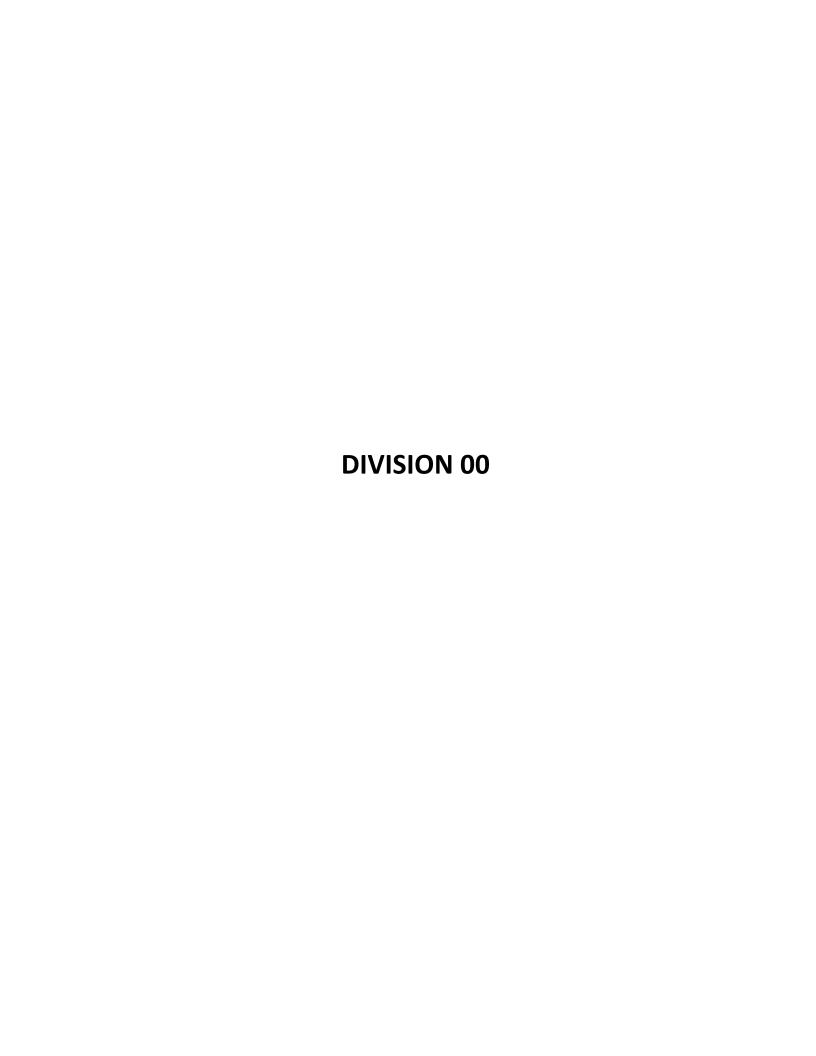
DIVISION 02 and 03 TECHNICAL SPECIFICATION by Beals and Thomas Inc.

021050 - RODENT CONTROL

321823 - NATURAL BASEBALL INFIELD RENOVATIONS

EXHIBIT by Beals and Thomas Inc.

31 50 00 Site work Plans



SECTION 00 02 00 CITY OF WALTHAM MASSACHUSETTS

NOTICE TO BIDDERS

Infield Renovations, McCabe Playground and Nipper Maher Park,

WALTHAM, MASSACHUSETTS

The City of Waltham, Massachusetts invites sealed bids from Contractors for **Infield Renovations**, **McCabe Playground and Nipper Maher Park, Waltham**, Massachusetts. The work at the two sites includes the removal of the existing surfaces includes general earthwork and grading operations, , fencing, drainage improvements, etc.

<u>PLANS, SPECIFICATIONS</u> and other Contract Documents may be obtained by visiting the City's Web Site at <u>www.city.waltham.ma.us/bids</u>

Copies of Addenda will be e- mailed to the registered Bidders without charge. Addenda will also be posted on the web site above

Sealed <u>GENERAL BIDS</u> for this project will be accepted from eligible bidders at the Purchasing Department, Waltham City Hall, 610 Main Street, Waltham, MA 02452 until **10:00 AM on February 27, 2020**, at which place and time they shall be publicly opened, read aloud and recorded for presentation to the Awarding Authority.

A <u>PRE-BID CONFERENCE AND SITE INSPECTION</u> will be held for all interested parties at 10:00 AM on February 14, 2020. Meet first at Nipper Maher Park. 68 Dartmouth Road, Waltham, MA 02453. The Site inspection will continue to the Monsignor McCabe Playground at 90 Charlotte Road, Waltham. Attendance at this pre-bid conference is strongly recommended but not mandatory for parties submitting a bid. It will be the only opportunity to visit the site prior to the bid opening.

LAST DAY FOR WRITTEN QUESTIONS is at 12 noon February 18, 2020. Questions are to be sent via e-mail only to Jpedulla@city.waltham.ma.us

PROJECT STARTING DATE: Not earlier then July 6, 2020. The Final Project completion is 60 days from the date of the Notice-to-Proceed.

Each general bid shall be accompanied by a bid deposit in the form of a bid bond, certified check, or a treasurer's or cashier's check issued by a responsible bank or trust company, payable to the City of Waltham in the amount of five percent (5%) of the value of the bid

Bids shall be made on the basis of the Minimum Wage Rates as determined by the Commissioner of Labor and Industries, Pursuant to the Provisions of Chapter 149, Sections 26 to 27D inclusive of Massachusetts General Laws, a copy of which is found in the City's Web site at www.city.waltham.ma.us/bids.

Bidders' selection procedures and contract award shall be in conformity with the rules of Commonwealth of Massachusetts statute Chapter 30, §39M.

Performance and Labor and Materials payment bonds in the full amount of the contract price will be required from the successful bidder.

The Awarding Authority reserves the right to reject any or all general bids, if it be in the public interest to do so, and to reject any sub-bid on any sub-trade if it determines that such sub-bid does not represent the sub-bid of a person competent to perform the work as specified or that less than three such sub-bids were received and that the prices are not reasonable for acceptance without further competition.

The successful bidder will be required to furnish a Certificate of Insurance, naming the City of Waltham as an Additional Named Insured with a waiver of subrogation, for General Liability and Vehicle Liability in the amount of \$1,000,000 per occurrence and \$1,000,000 in the aggregate and Worker's Compensation Insurance as prescribed by law.

In accordance with the laws of the Commonwealth of Massachusetts the undersigned certifies that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by OSHA that is at least 10 hours in duration at the time the employee begins work and shall furnish documentation of successful completion of said course with the first certified payroll report for each employee.

CITY ORDINANCE. APPROVAL OF CONTRACTS BY MAYOR, SEC. 3-12 OF THE CITY ORDINANCES.

All contract made by any department, board or commission where the amount involved is two thousand dollars (\$2,000) or more shall be in writing, and no such contract shall be deemed to have been made or executed until the approval of the Mayor is affixed thereto. Any construction contract shall, and all other contracts may, where the contract exceed five thousand dollars (\$5,000) be required to be accompanied by a bond with sureties satisfactory to the Mayor.

CITY OF WALTHAM

Joseph Pedulla, CPO Purchasing Department City Hall, 610 Main Street Waltham, MA 02452

SECTION 00 10 00 - INSTRUCTION TO BIDDERS

PART 1 - GENERAL

1.01 SCHEDULE OF DATES

- A. Advertisement appears in Central Register, Plans and Specifications ready for Bidders at www.city.waltham.ma.us/bids
- B. <u>Pre-bid walkthrough and site inspection</u>: February 14, 2020, at 10:00 AM. Meet first at Nipper Maher Park 65 Dartmouth Street, Waltham, MA 02453. The Site inspection will continue to the Monsignor McCabe Playground at 90 Charlotte Road, Waltham.
- C. <u>Questions</u> and requests for interpretations may be submitted in writing via e-mail ONLY to Jpedulla@city.waltham.ma.us up to **12:00 noon February 18, 2020.**
- D. Addenda will be issued with interpretations as determined by the Purchasing Department only via e-mail and posting on the web site.
- E. <u>General Bids Deadline</u>: 10:00 A.M. on February 27, 2020, in the Purchasing Department, City Hall, 610 Main Street, Waltham, MA 02452, Attn: J. Pedulla, CPO, where the bids will be publicly open and read.
- F. **Project Starting Date: Not earlier then July 6, 2020.** The Final Project completion is 60 days from the date of the Notice-to-Proceed.

G.

1.02 BIDDING PROCEDURE

- A. Bids for the work are subject to the provisions of General Laws, Chapter 30, § 39M, as amended. Regulations governing the bidding procedures as set forth in the above mentioned amended General Laws must be followed.
- B. In the event of any inconsistencies between any of the provisions of these Contract Documents and of the cited statute, anything herein to the contrary notwithstanding, the provisions of the said statute shall control.
- C. No General Bid received by the Awarding Authority after the time respectively established herein for the opening of General Bids will be considered, regardless of the cause for the delay in the receipt of any such bid.

1.03 WITHDRAWAL OF BIDS

A. Bids may be withdrawn prior to the time respectively established for the opening of General Bids only on written request to the Awarding Authority.

1.04 INTERPRETATION OF CONTRACT DOCUMENTS

- A. No oral interpretation will be made to any bidder. All questions or requests for interpretations must be made in writing to the City.
- B. Every interpretation made to a bidder will be in the form of an Addendum to the drawings and/or specifications, which will be made available to all persons to whom Contract Documents have been issued.
- C. Failure of the Awarding Authority to send, or of any bidder to receive any such Addendum shall not relieve any bidder form obligation under his bid as submitted.
- D. All such Addenda shall become a part of the Contract Documents.

1.05 EXAMINATION OF SITE AND CONTRACT DOCUMENTS

- Each bidder may visit the site of the proposed work and fully acquaint himself with conditions as they exist, and may also thoroughly examine the Contract Documents.
 Failure of any bidder to visit the site and acquaint himself with the Contract Documents shall not relieve any bidder from any obligation with respect to his bid.
- B. By submitting a bid, the bidder agrees that the Contract Documents are adequate and that the required result for a full and complete installation can be produced. The successful bidder shall furnish any and all labor, materials, insurance, permits and all other items needed to produce the required result to the satisfaction of the Awarding Authority.

1.06 BID SECURITY

- A. The General Contractor's bid must be accompanied by bid security in the amount of five percent (5%) of the bid.
- B. At the option of the bidder, the security may be bid bond, certified, treasurer's or cashier's check issued by a responsible bank or trust company. No other type of bid security is acceptable.
 - Bid Bonds shall be issued by a Surety Company qualified to do business under the laws of the Commonwealth of Massachusetts.
- C. Certified, Treasurer's or Cashier's check shall be made payable to the City of Waltham, Massachusetts.
- D. The bid security shall secure the execution of the Contract and the furnishing of a Performance and Payment Bond by the successful General Bidder for 100% of the contract value.

E. Should any General Bidder to whom an award is made fail to enter into a contract therefore within five (5) days, Saturdays, Sundays and Legal Holidays, excluded, after notice of award has been mailed to him or fail within such time to furnish a Performance Bond and also a Labor and Materials or Payment Bond as required, the amount so received from such General Bidder through his Bid Bond, Certified, Treasurer's or Cashier's check as bid deposit shall become the property of the City of Waltham, Massachusetts as liquidated damages; provided that the amount of the bid deposit, which becomes the property of the City of Waltham, Massachusetts, shall not in any event exceed the difference between his bid price and the bid price of the next lowest responsible and eligible bidder; and provided further that, in case of death, disability, bona fide clerical error or mechanical error of a substantial nature, or other unforeseen circumstances affecting the General Bidder, his deposit shall be returned to him.

1.07 BID FORM

- A. General Bids shall be submitted on the "FORM FOR GENERAL BID" enclosed. Erasures or other changes must be explained or noted over the signature of the bidder.
- B. Bid forms must be completely filled in. Bids which are incomplete, conditional, or obscure, or which contain additions not called for will be rejected.
- C. General Bidders shall submit one set of executed bid forms to the Awarding Authority.

1.08 SUBMISSION OF BIDS AND BID SECURITIES

A. Each bid submitted by a General Contractor shall be enclosed in a sealed envelope that shall be placed with the bid security in an outer envelope. The outer envelope shall be sealed and clearly marked as follows:

(Firm Name):	
	General Bid and Bid Security for:
	Infield Renovations, McCabe and Nipper Maher Parks

1.09 AWARD OF CONTRACT

- A. The Contract shall be awarded to the lowest responsible and eligible General Bidder on the basis of competitive bids in accordance with the procedure set forth in the provision of Chapter 30, §39M of the General Laws of the Commonwealth of Massachusetts.
- B. If the bidder selected as the General Contractor fails to perform his agreement to execute a contract in accordance with the terms of his General Bid, and furnish a Performance Bond and also a Labor and Materials or Payment Bond, as stated in his General Bid an award shall be made to the next lowest responsible and eligible bidder.
- C. The words "lowest responsible and eligible bidder" shall be the bidder whose name is the lowest of those bidders possessing the skill, ability and integrity necessary for the

faithful performance of the work and who 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, on the work. Essential information in regard to such qualifications shall be submitted in such form as the Awarding Authority may require.

D. Action on the award will be taken within sixty (60) days, Saturdays, Sundays and Legal Holidays excluded after the opening of the bids.

1.10 SECURITY FOR FAITHFUL PERFORMANCE

- A. The successful bidder must deliver to the Awarding Authority simultaneously with his delivery of the executed contract, an executed Performance Bond, and also a Labor and materials or Payment Bond, each issued by a surety company qualified to do business under the laws of the Commonwealth and satisfactory to the Awarding Authority and each in the sum of One Hundred Percent (100%) of the Contract Price, as surety for the faithful performance of his contract, and for the payment of all persons performing labor or furnishing materials in connection therewith. Said bonds shall provide that, if the General Contractor fails or refuses to complete the Contract, the Surety Company will be obligated to do so.
- B. Premiums are to be paid by the General Contractor, and are to be included in the Contract Price.

1.11 EQUAL OPPORTUNITY

A. The City of Waltham is an Equal Opportunity employer and will require compliance with the minority business enterprise plan (MBE) on file in the Purchasing Department

1.12 PRE-BID WALK-THRU

A. A pre-bid conference will be held at the site on February 14, 2020, at 10:00 AM. Meet at the Nipper Maher Park, 65 Dartmouth Street, Waltham, MA. Interested parties are encouraged to attend given that this will be the only time the site is available prior to the submission of bids. Further, prior to the bid opening, potential bidders may not go onto the site any time other than the aforementioned pre-bid conference.

1.13 SITE VISITS

A. Prospective bidders are prohibited from going onto the site prior to the Bid Opening or any time other than the pre-bid walk-thru, as set forth in Section 1.12 above, unless authorized by the City an Addendum to the bid documents.

1.14 CONTRACT DOCUMENTS

A. The Awarding Authority shall make available the bid documents and addenda in the City Web site at www.city.waltham.ma.us/bids. No plans will be mailed.

1.15 EQUALITY

A. Except where otherwise specifically provided to the contrary, the words "or approved equal" are hereby inserted immediately following the name or description of each article, assembly, system, or any component part thereof in the Contract Documents. It is the Contractor's responsibility to provide all the research and documentation that would prove a product or assembly is "equal". Failure to provide research or documentation does not alleviate the Contractor's responsibility to meet the schedule.

1.16 TAX FREE NUMBER

A. The City of Waltham has a tax-free number.

1.17 SCHEDULE

A. The work of the Contract shall be Substantially Complete in **60 calendar days** after the date of the Notice-to-Proceed.

1.18 INTENTIONALLY LEFT BLANK

1.19 WEEKLY JOB MEETINGS

A. There will be a weekly job meeting at the site on the same agreed-upon day and time. Time will be provided to discuss and view the progress of the work and to answer questions. The Contractor's job Superintendent and Project Manager shall attend each meeting. The City reserves the right to have job meetings conducted in the location of its choosing.

1.20 PROJECT SUPERINTENDENT

A. The Contractor shall provide the same person as Superintendent for the entire duration of the project. Failure to maintain the same person in this position shall result in a One Thousand Dollar (\$1,000.00) penalty per incident which shall cover the Architect's time to re-orient new personnel.

1.21 AWARD

A. The Awarding Authority reserves the right to reject any or all bids if it be in the public interest to do so, and to act upon the bids and make its award in any lawful manner.

1.22 PREVAILING WAGE SCHEDULE

A. Bids shall be made on the basis of the Prevailing Wage Schedule, as determined by the Commissioner of Labor and Industries, pursuant to the provision of the Massachusetts General Laws. The Prevailing wage Schedule for this project can be found in the City's web Site at www.city.waltham.ma.us/bids

1.23 CONFLICT OF INTEREST

A. A bidder filing a proposal thereby certifies that the proposal is made in good faith, without fraud, collusion, or connection of any kind with any other bidder for the same work, and that the bidder is competing solely on its own behalf without connection with, or obligation to, any undisclosed person or firm.

1.24 PROCEED ORDERS

A. No bidder is to proceed without a proceed order as set out in the contract.

1.25 INTENTIONALLY LEFT BLANK

1.26 COMPLIANCE WITH MASSACHUSETTS GENERAL LAWS

A. Pursuant to Massachusetts General Laws, Chapter 62C, Section 49A, I certify under the penalty of perjury that I, to the best of my knowledge and belief have filed all state tax returns and paid all the state taxes required under law.

1.27 CONSTRUCTION BARRICADES

- A. The General Contractor shall provide all barricades to enclose the work area to prevent unauthorized access to the site.
 - 1. The barricades shall provide enough room for <u>all</u> construction activities to be performed while separated from pedestrians, students, and staff on site.
 - 2. Safety is the sole responsibility of the Contractor and any barricades necessary to protect the work and the public shall be provided.
 - 3. Provide entrance protection.

1.28 INSURANCE

- A. The contractor shall purchase and maintain, at his expense all insurance required by the Contract. Documents and all insurance required by the applicable laws of Massachusetts, including but not limited to, General Laws, Chapter 146, in connection with all hoisting equipment.
- B. The Contractor shall purchase and maintain such insurance as will protect him from claims under workmen's compensation acts and from claims for damages because of bodily injury, including death and all property damage including, without limitation, damage to buildings and adjoining the site of construction which might arise from and during operations under this contract, whether such operations be by himself or by any subcontractor or anyone directly or indirectly employed by either of them including:

1. Statutory Worker's Compensation and Employer's Liability

The contractor shall provide insurance for the payment of compensation and the furnishing of other benefits under Chapter 152 of the General Laws (so-called Worker's Compensation Act) to all persons to be employed under this contract and shall continue in force such insurance as aforesaid shall be deemed a material breach of this Contract and shall operate as an immediate termination thereof. The contractor shall, without limiting the generality of the foregoing, conform to the provisions of Section 34A of Chapter 149 of the General Laws, which Section is incorporated herein by reference and made a part of hereof.

2. Comprehensive General Liability Insurance

Minimum bodily injury limits of \$ 1,000,000 per person and \$ 1,000,000 per accident, and property damage limits of \$ 500,000 per accident and \$ 1,000,000 aggregate during any 12-month period, shall include the following:

- a. Public liability (bodily injury and property damage)
- b. X.C.U. (explosion, collapse, and underground utilities)
- c. Independent contractor's protective liability.
- d. Products and completed operations.
- e. Save harmless agreement for Owner and Architects set forth in ARTICLE 10.11 of the GENERAL CONDITIONS.
- 3. Comprehensive All Risk Motor Vehicle Liability Insurance

Minimum bodily injury limits of \$ 500,000 per person, \$ 1,000,000 per accident, and property damage limit of \$ 1,000,000 per accident.

4. All Risk Insurance

Covering all Contractors' equipment with a provision for Waiver of Subrogation against the Owner.

- 5. Excess Liability Insurance in Umbrella Form with combined Bodily Injury and Property Damage Limit of \$ 1,000,000.
- 6. <u>City of Waltham shall be a Named Additional Insured with a Waiver of Subrogation on the insurance policy for this project.</u>

1.29 SITE ACCESS

- A. The General Contractor shall gain access to the site via routes approved by the Owner.
 - 1. The General Contractor as part of the bid price will restore all roads, curbs, driveways, walks and grassed or landscaped areas damaged during construction.

1.30 CONSTRUCTION TRAILER

- A. The General Contractor shall locate the construction trailer at locations approved by the Owner.
- B. The General Contractor shall locate all on site stored or staged materials within the enclosed area designated by the Owner.
- 1.31 INTENTIONALLY LEFT BLANK

Signature of Individual or Corporate Name

1.32 COMPLETE BID FORMS

- A. Please Note: Each bidder must <u>fill in all the blanks</u> on all the bid forms, even if the information is "zero dollars" or "not applicable". Also, please acknowledge <u>all</u> Addenda issued by the Awarding Authority
- 2.00 FUNDS APPROPRIATION and LOAN AUTHORIZATION.
 - A THE CONTRACT OBLIGATION ON BEHALF OF THE CITY IS SUBJECT TO PRIOR

 APPROPRIATION OF MONIES FROM THE GOVERNMENTAL BODY AND AUTHORIZATION
 BY THE MAYOR.
- 3.0 CITY ORDINANCE. APPROVAL OF CONTRACTS BY MAYOR, SEC. 3-12 OF THE CITY ORDINANCES.
 - All contract made by any department, board or commission where the amount involved is two thousand dollars (\$2,000) or more shall be in writing, and no such contract shall be deemed to have been made or executed until the approval of the Mayor is affixed thereto. Any construction contract shall, and all other contracts may, where the contract exceed five thousand dollars (\$5,000) be required to be accompanied by a bond with sureties satisfactory to the Mayor

·	
Ву:	
(Signature of Corporate Officer if applicable)	<u> </u>
Title:	<u> </u>
Social Security Number or Federal Identification Numb	per:

END OF SECTION

SECTION 00 31 00

FORM FOR GENERAL BID

Infield Renovations, McCabe Playground & Nipper Maher Park

General Bid Opening Date: 10:00 am, February 27, 2020

Joseph Pedulla, CPO City of Waltham 610 Main Street Waltham, MA 02452

A. Basic Price

The undersigned:

(Please type or print the business name of the bidding firm)

having visited the site of the above project and having familiarized myself with the local conditions affecting the cost of the work and with the contract documents, including Amendments and Addenda No's. _____, _____ hereby proposes to furnish all labor (including Sub Bids), materials, tools, equipment, insurance, permits and taxes, and to do and lawfully perform all things as provided in the specifications, all in accordance with the contract documents, for the sum of:

TOTAL DIG (III WOIGS)_

TOTAL Bid (in words)

Dollars, \$

- B. Left Blank Intentionally
- C. The undersigned agrees that, if s/he is selected as General Contractor, s/he will within five days, Saturdays, Sundays and legal holidays excluded, after presentation thereof by the Awarding Authority, execute a contract in accordance with the terms of this bid and furnish a performance bond and also a labor and materials or payment bond, each issued by a surety company qualified to do business under the laws of the Commonwealth and satisfactory to the Awarding Authority and each in the sum of the contract price, the premiums for which are to be paid by the General Contractor and are included in the contract price.
- D. The undersigned certifies that s/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 and that s/he will comply fully with all laws and regulations applicable to awards made subject to section forty-four A.
- E. The undersigned as Bidder certifies that if this proposal is accepted, s/he will furnish to the City of Waltham with the invoice for the material or equipment supplied two copies of any and all Material Safety Data Sheets applicable to such material or equipment, as required by M.G.L. Chapter 111F, so called "Right to Know Law".

- F. The undersigned certifies under penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. The word "person" shall mean any natural person, joint venture, partnership, corporation, or other business or legal entity.
- G. Substantial Completion
 - 1. The work of the Contract shall be Substantially Completed in sixty (60) calendar days from the date of the Notice-to-Proceed.
- H. In accordance with M.G.L., the undersigned certifies that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by OSHA that is at least 10 hours in duration at the time the employee begins work and shall furnish documentation of successful completion of said course with the first certified payroll report for each employee.

	Since	rely,
		(Bidder)
	D	(Address of Bidder)
(Carl. if Carra arctica)	Ву:	(Title - Owner*, Partner*)
(Seal, if Corporation)	By:	
	•	(If Corporation - Name and Office)

^{*} If the business owned by the individual or partnership is conducted under a trade or assumed name, a certified copy of doing business under an assumed name should be annexed.

SECTION 00 33 1 0

PREVAILING WAGE SCHEDULE

Please visit the City Web Site at www.city.waltham.ma.us/bids for a copy of the schedules

SECTION 00 50 00

AGREEMENT

CITY OF WALTHAM

hetween the CITY (This agreement, made this OF WALTHAM, party of the first pa		
hereinafter called t	he CONTRACTOR.		
•	Witnesseth, that the parties to parties to part of the others herein contained ractor for his heirs, executors, adm	d, do hereby agree, th	ne CITY OF WALTHAM for

To furnish all equipment, machinery, tools and labor, to furnish and deliver all materials required to be furnished (except as otherwise specified) and deliver in and about the project and to do and perform all work in strict conformity with the provisions of this Contract and of the Notice to Bidders, bid, Project Manual, and Drawings hereto annexed. The said Notice to Bidders, bid, Project Manual, and Drawings are hereby made a part of this contract as fully and to the same effect as if the same had been set forth at length and incorporated in the contracts.

ARTICLE 3. In consideration of the foregoing premises the CITY agrees to pay and the CONTRACTOR agrees to receive as full compensation for everything furnished and done by the CONTRACTOR under this contract, including all work required by not included in the items herein mentioned, and also for all loss or damage arising out of the nature of the work aforesaid, or from the action of the elements, or from any unforeseen obstruction or difficulty encountered in the prosecution of the work, and for all expenses incurred by or in consequence of the suspension or discontinuance of the work specified, and for well and faithfully completing the work, and the whole thereof, as herein provided, such prices as are set forth in the accompanying bid.

This Agreement entered into as of the day and year first written above.

CITY OF WALTHAM, MASSACHUSETTS

FOR THE CITY

Date: _____

I CERTIFY THAT SUFFICIENT FUNDS ARE AVAILABLE FOR THIS CONTRACT

Jeannette A. McCarthy, MAYOR, CONTRACTOR (Signature), City of Waltham Date: _____ Date: _____ Company Address Luke Stanton, Asst. City Solicitor Date: _____ APPROVED AS TO FORM ONLY Nick Abruzzi, Recreation Director Date: _____ Joseph Pedulla, Purchasing Agent Date: _____ Paul Centofanti, Auditor

FOR THE COMPANY

SECTION 00501

PERFORMANCE BOND

CITY OF WALTHAM

KNOW ALL MEN BY THESE PRESE	NT THAT,	
		as
held and firmly bound unto the C may furnish materials for or perfethe Contract hereinafter mention	CITY OF WALTHAM and to such pers orm labor on the work, construction ned, or who may have any suits or c m or arising out of the work done u	ons, firms, and corporations, who nor improvements contemplated in laims for injury or damage to
(lawful money of the United State	eir heirs, executors, administrators	reof the Contractor and the Surety or successors and assigns, jointly and
THE CONDITION OF THIS OBLIGA	TION IS SUCH, THAT for the above b	ourden (the Contractor) its
life of any guaranty or warranty, f	or defective materials and workmar	he Contract, on his part and during the ship required under this Contract, and

heirs, executors, administrators and assigns, shall faithfully perform the Contract, on his part and during the life of any guaranty or warranty, for defective materials and workmanship required under this Contract, and satisfy all claims and demands incurred for the same; and shall fully indemnify and save harmless the City from all cost and damage which it may suffer by reason of failure so to do, and shall fully reimburse and repay the City all outlay and expense which the City may incur in making good any such default, and shall promptly make payment to all persons supplying labor or materials for use in the prosecution of the work provided for in said Contract; and shall indemnify and save harmless the said City, its officers and agents from any and all suits or claims for injury or damage to persons or property resulting from or arising our of the work done under this Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

PROVIDED, HOWEVER, that (except as to the City) no suit, action or proceeding by reason of any default whatever shall be brought on this Bond after two years from the day on which the final payment under the Contract falls due.

AND PROVIDED, that any alterations which may be made in the terms of the Contract or in the work to be done under it, or any assignment, transfer or subletting of any part of the work, or the giving by the City of any extension of time for the performance of the Contract, or any other forbearance on the part of either the City or the Contractor to the other, shall not in any way release the Contractor and the Surety of Sureties, or either or any of them, their heirs, executors, administrators, successors or assigns from their liability hereunder, notice to the Surety or Sureties of any such alterations, assignment, transfer, subletting extension or forbearance being hereby waived.

McCabe Playground and Nipper Maher Park. This Bond is made for the use and benefit of all persons, firms, and corporations who may furnish materials, or perform any labor for or on account of said work, construction or improvements, or who may have any suits or claims for injury or damage to persons or property resulting from or arising our of the work done under this Contract, and they and each of them are hereby made obligees hereunder the same as if their own proper names were written herein as such, and they and each of them may sue hereon in their own names for their own use and benefit.

And the 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 hereunder, or the Specifications accompanying the same, shall in any way affect its obligations on this Bond, and it does hereby waive notice of any such changes, extension of time, alteration or addition to the terms of the Contract or to the work, or to the Specifications.

IN WITNESS WHEREOF, said	Contractor a	ınd Suı	rety have hereunto set their resp	ective names this
	day of _		, 20	
WITNESSES:				
(CONTRACTOR)	(SEAL)			
NAME(SIGNATURE AND TITLE)	BY			_
ADDRESS				
(SURETY)			(SEAL)	
NAME(SIGNATURE AND TITLE)	BY			_
ADDRESS		ВҮ	(ATTORNEY-IN-FACT)	

POWER OF ATTORNEY

Attorneys-in-fact who sign bonds must file with each bond a certified copy of their power of attorney to sign said bonds.

SECTION 00502

PAYMENT BOND

CITY OF WALTHAM

KNOW ALL MEN BY THESE PRESENT TH	IAI,	20
		as
principal and surety, are held and firmly bound unto corporations, who may furnish materia improvements contemplated in the Co	als for or perform labor on the wo	uch persons, firms, and ork, construction or
or claims for injury or damage to perso done under this Contract, in the		
SUM OF	DOLLARS (\$)
(lawful money of the United States of Surety of Sureties bind themselves a assigns, jointly and severally, firmly by	America) for the payment where and their heirs, executors, admir	of the Contractor and the
THE CONDITION OF THIS OBLIGATION	IS SUCH, THAT for the above burd	den (the Contractor) its
heirs, executors, administrators and as during the life of any guaranty or warra this Contract, and satisfy all claims and save harmless the City from all cost an and shall fully reimburse and repay th	anty, for defective materials and wo demands incurred for the same; and d damage which it may suffer by	orkmanship required under nd shall fully indemnify and reason of failure so to do,

PROVIDED, HOWEVER, that (except as to the City) no suit, action or proceeding by reason of any default whatever shall be brought on this Bond after two years from the day on which the final payment under the Contract falls due.

then this obligation shall be null and void; otherwise it shall remain in full force and effect.

making good any such default, and shall promptly make payment to all persons supplying labor or materials for use in the prosecution of the work provided for in said Contract; and shall indemnify and save harmless the said City, its officers and agents from any and all suits or claims for injury or damage to persons or property resulting from or arising our of the work done under this Contract,

AND PROVIDED, that any alterations which may be made in the terms of the Contract or in the work to be done under it, or any assignment, transfer or subletting of any part of the work, or the giving by the City of any extension of time for the payment of the Contract, or any other forbearance on the part of either the City or the Contractor to the other, shall not in any way release the Contractor and the Surety of Sureties, or either or any of them, their heirs, executors, administrators, successors or assigns from their liability hereunder, notice to the Surety or Sureties of any such alterations, assignment, transfer, subletting extension or forbearance being hereby waived.

This Bond is made for the use and benefit of all persons, firms, and corporations who may furnish materials, or perform any labor for or on account of said work, construction or improvements, or who

McCabe Playground and Nipper Maher Park.

may have any suits or claims for injury or damage to persons or property resulting from or arising our of the work done under this Contract, and they and each of them are hereby made obligees hereunder the same as if their own proper names were written herein as such, and they and each of them may sue hereon in their own names for their own use and benefit.

And the 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 hereunder, or the Specifications accompanying the same, shall in any way affect its obligations on this Bond, and it does hereby waive notice of any such changes, extension of time, alteration or addition to the terms of the Contract or to the work, or to the Specifications.

IN WITNESS WHEREOF, sai day o			•	unto set t	heir respect	ive name	es this _
WITNESSES:							
(CONTRACTOR)	(SEAL)						
NAME(SIGNATURE AND TITLE)		BY _					
ADDRESS							
(SURETY)	(SEAL)						
NAME(SIGNATURE AND TITLE)		BY _					
ADDRESS(ATTORNEY-IN-FACT)		BY _					

POWER OF ATTORNEY

Attorneys-in-fact who sign bonds must file with each bond a certified copy of their power of attorney to sign said bonds.

SECTION 00 50 30

GENERAL CONDITIONS

1. INFORMATION

All information shall come from the Office of the City Purchasing Agent. The Contractor shall inquire at this office for any information needed. Wherever the words "or equal as approved" are used, it is to be understood that the opinion of the City Purchasing Agent shall govern.

2. SUITS

The Contractor shall assume defense of and shall indemnify and hold the City and its agents harmless from all suits and claims against the City and its sub-contractors arising from the use of any invention, patent right labor or employment, or from any act of omission or neglect of the City, its agents, employees or any subcontractor in performing the work, under this contract.

3. LAWS AND REGULATIONS

The Contractor shall conform to all the applicable rules, regulations, laws and ordinances of the City of Waltham, the Commonwealth of Massachusetts, the United States of America and all agencies having jurisdiction over this contract.

4. PROTECTION OF PROPERTY

The Contractor shall take all proper precautions to protect the City's property from damage and unnecessary inconvenience. Any City property damaged by the Contractor in carrying out the provisions of this contract shall be restored to its original condition, by and at the expense of the Contractor.

5. PROTECTION OF PERSONS

The Contractor shall take all proper precautions to protect persons from injury, unnecessary inconvenience, and shall be responsible for his failure to do so. The Contractor agrees to hold the City harmless from any and all liabilities of every nature and description, which may be suffered through bodily injury, including death, to any person, by reason of negligence of the Contractor, his agents or employees, or any subcontractor.

6. INSURANCE

A. WORKMAN'S COMPENSATION: The Contractor shall provide by insurance for the payment of compensation and furnishing of other benefits under Chapter 152 of the General Laws of the Commonwealth of Massachusetts to all persons to be employed under this contract, the premiums for which shall be paid by the Contractor.

B. COMPREHENSIVE GENERAL LIABILITY

Bodily Injury: \$1,000,000 Each Occurrence

\$2,000,000 Aggregate

Property Damage: \$1,000,000 Each Occurrence

\$2,000,000 Aggregate

C. AUTOMOBILE (VEHICLE) LIABILITY

Bodily Injury \$2,000,000 Each Occurrence

Property Damage \$1,000,000 Aggregate

D. UMBRELLA POLICY

General liability \$2,000,000

Your bid response must include a Certificate of Insurance with the above limits as a minimum. In addition, the Certificate of Insurance must have the following text contained in the bottom left box of the Certificate: "The City of Waltham is a Named Additional Insured for all Insurance". The Certificate of Insurance must be mailed directly to:

General Conditions 00 50 30 Office of the Purchasing Agent Purchasing Department City of Waltham 610 Main Street Waltham, MA 02452

7. LABOR AND MATERIALS BOND

The Contractor agrees to execute and deliver to the City, a Performance Bond and a Labor and Materials Bond equal to 100% of the contract value. This contract shall not be in force until said bond has been delivered and accepted by the City. Bond to be issued by a company licensed by the Commonwealth of Massachusetts.

8. PERSONNEL:

The Contractor shall employ a competent supervisor and all properly licensed personnel necessary to perform the services required in this contract. The City Purchasing Agent shall have the right to require the Contractor to remove and/or replace any of the personnel for nonperformance or for unprofessional behavior. The City Purchasing Agent may require the Contractor to submit a weekly performance record of the areas and of the work performed, on forms approved by the City Purchasing Agent. The Contractor or his supervisor shall be available to inspect such work as required by the City Purchasing Agent.

9. PREVAILING WAGES

The Contractor is required to pay the prevailing wages as determined by the Federal Government and by Chapter 149, Sections 26 and 27D of the Massachusetts General Laws, including the submission of weekly payrolls to the awarding authority. Copies of the Prevailing Wage Schedule is found on line at www.city.waltham.ma.us/open-bids

10. MATERIALS

The City or its Agent reserves the right to approve or reject any supplies, material or equipment used by the Contractor. The Contractor agrees to replace any supplies, material or equipment used by the Contractor. The Contractor agrees to replace any rejected supplies, materials or equipment, to the satisfaction of the City or its Agents.

11. TERMINATION OF CONTRACT

This contract may be terminated by the City upon deliverance to the Contractor of a five-day written notice of said termination.

12. CONTRACT OBLIGATIONS

Contract obligations on behalf of the City are subject to an annual appropriation to cover the contract obligation and shall be in force until the date of Final acceptance excluding any guarantee period.

13. BIDDER EXPERIENCE EVALUATION

Each bidder shall submit with his bid, all the information relative to their experience and qualifications in performing the work required under this contract and shall have been in business for a minimum of five (5) years, in order for their bid to be considered.

14. NOT-TO-EXCEED AMOUNT

The bid amount proposed in your company's response is a "not-to- Exceed" amount unless the City makes changes, in writing, to the scope of work to be performed. The Change Order must be signed and approved by the City's Purchasing Agent, City Auditor, Law Department and the Mayor prior to the commencement of the change order work. No work is to begin until the proper approvals have been obtained. A change order will be priced at the unit price. Failure to comply with this procedure will result in the cancellation of the contract and the non-payment of services provided

General Conditions 00 50 30

16. FINANCIAL STATEMENTS.

The City <u>may</u> require, within five (5) days after the bid opening, a complete and detailed Financial Statement prepared by a Certified Public Account, to determine a bidder's financial stability.

17 BREACH OF CONTRACT/ NON PERFORMANCE

If the Contractor shall provide services in a manner, which is not to the satisfaction of the City, the City may request that the Contractor refurnish services at no additional cost to the City until approved by the City. If the Contractor shall fail to provide services, which are satisfactory to the City, the City in the alternative may make any reasonable purchase or Contract to purchase services in substitution for those due from the Contractor. The City may deduct the cost of any substitute Contract for nonperformance of services together with incidental and consequential damages from the Contract price and shall withhold such damages from sums due or to become due to the Contractor. If the damages sustained by the City exceed sums due or to become due, the Contractor shall pay the difference to the City upon demand. The Contractor shall not be liable for any damages sustained by the City due to the Contractor's failure to furnish services under the terms of this Contract if such failure is in fact caused by the occurrence of a contingency the nonoccurrence of which was a basic assumption under which this Contract was made, including a state of war, embargoes, expropriation of labor strike or any unanticipated federal, state or municipal governmental regulation of order, provided that the Contractor has notified the City in writing of such cause within seven (7) days after its occurrence.

18 RIGHT TO AUDIT

The City of Waltham has the right to review and audit documents related to this contract. This right extends to any subcontractor, supplier or other entity used by the prime contractor to fulfill the obligations under this contract.

19. CITY ORDINANCE. APPROVAL OF CONTRACTS BY MAYOR, SEC. 3-12 OF THE CITY ORDINANCES.

All contract made by any department, board or commission where the amount involved is two thousand dollars (\$2,000) or more shall be in writing, and no such contract shall be deemed to have been made or executed until the approval of the Mayor is affixed thereto. Any construction contract shall, and all other contracts may, where the contract exceed five thousand dollars (\$5,000) be required to be accompanied by a bond with sureties satisfactory to the Mayor.

20. BID OPENING INCLEMENT WEATHER

If, at the time of the originally scheduled bid opening, City Hall is closed to inclement weather or another unforeseeable event, the bid opening will be extended until 2:00 PM on the next normal business day. Bids will be accepted until that date and time.

21 FUNDS APPROPRIATION.

THE CONTRACT OBLIGATION ON BEHALF OF THE CITY IS SUBJECT TO PRIOR APPROPRIATION OF MONIES FROM THE GOVERNMENTAL BODY AND AUTHORIZATION BY THE MAYOR.

22 THE AWARDING AUTHORITY RESERVES THE RIGHT TO REJECT ANY OR ALL BIDS, OR ANY PART OF ANY BID WHICH IN THE OPINION OF THE AWARDING AUTHORITY, IS IN THE BEST INTERESTS OF THE CITY OF WALTHAM.

END OF SECTION

General Conditions 00 50 30

Section 00 54 00

Compliance

These documents must be signed and returned with your bid

Compliance

The compliance documents in this section must be completed, signed and returned <u>with your bid package</u>.

Purchasing Department

City of Waltham 610 Main Street Waltham, MA 02452

Failure to submit the completed documents will cause the disqualification of the proposal.

Section Index

Check wh	en Complete
Non-collusion form and Tax Compliance form	
Corporation Identification Form	
Certificate of Vote Authorization	
 Certificate of Insurance (showing all limits of WC &GL) 	
Three (3) References	·
5% Bid Bond or Certified Check>	
	·
Prevailing Wage Certificate	
Right-to-know Law	
 OSHA 10 Certificate for all Assigned Employees (MGL ch30, §39M and Ch 149) 	
Before the commencement of the Job, the contractor must provide to the above	office:
 Performance and Payment Bonds each for 100% of the contract value and r the City of Waltham 	naming
Your Company's Name:	
Service or Product Bid	
NOTE: Failure to submit any of the required documents, in this or in other series response package may cause the disqualification of your proposal.	ctions, with your bid

NON-COLLUSION FORM AND TAX COMPLIANCE FORM

CERTIFICATE OF NON-COLLUSION

The undersigned certifies under pe	nalties of perjury that this bid or proposal has	been made and			
submitted in good faith and without collusion or fraud with any other person. As used in this					
certification, the word "person" sh	all mean any natural person, business, partner	ship, corporation,			
•	union, committee, club, or other organization, entity or group of individuals. The undersigned certifies				
		_			
	ny City officials, employees, entity, or group of				
the Purchasing Agent of the City of	Waltham was relied upon in the making of th	is bid			
	(Signature of person signing bid or proposal)	Date			
	(Name of business)				
	(and the second				
TA	AX COMPLIANCE CERTIFICATION				
					
	certify under the penalties of perjury that, to t pliance with all laws of the Commonwealth rela	<u>=</u>			
_	ctors, and withholding and remitting child sup	_			
,		•			
Signature of paragraphy submitting bid					
Signature of person submitting bid	or proposal Date				

NOTE

Name of business

Failure to submit any of the required documents, in this or in other sections, with your bid response package may cause the disqualification of your proposal.

CERTIFICATE OF VOTE OF AUTHORIZATION

Date:	
I	, Clerk ofhereby certify oard of Directors of said Corporation duly held on theday
that at a meeting of the Book ofat was following vote was duly pas	oard of Directors of said Corporation duly held on theday which time a quorum was present and voting throughout, the seed and is now in full force and effect:
the name and on behalf of t acknowledge and deliver al execution of any such contr and that this vote shall rem	(name) is hereby authorized, directed and empowered for this Corporation to sign, seal with the corporate seat, execute, I contracts and other obligations of this Corporation; the fact to be valid and binding upon this Corporation for all purposes, ain in full force and effect unless and until the same has been ed by a subsequent vote of such directors and a certificate of such lerk of this Corporation.
I further certify that	is duly elected/appointed
of s	aid corporation
SIGNED:	
	(Corporate Seal)
Clerk of the Corporation:	_
Print Name:	
	COMMONWEALTH OF MASSACHUSETTS
County of	Date:
	the above named and acknowledged the foregoing instrument to perfore me,
Notary Public;	
My Commission expires:	

CORPORATION IDENTIFICATION

The bidder for the information of the Awarding Authority furnishes the following information.

If a Corporation:	
Incorporated in what s	state
President	
Federal ID Number	
If a foreign (out of State) Cor	poration – Are you registered to do business in Massachusetts?
Yes, No	
If you are selected for this we	ork you are required under M.G.L.ch. 30S, 39L to obtain from the
Secretary of State, Foreign Co	orp. Section, State House, Boston, a certificate stating that you
Corporation is registered, an	d furnish said certificate to the Awarding Authority prior to the
award.	
If a Partnership: (Name all pa	artners)
Name of partner	
Name of partner	
Residence	
If an Individual:	
If an Individual doing busines	ss under a firm's name:
Name of Firm	
Name of Individual	
Business Address	
Residence	
Date	
Name of Bidder	
By	
Signature	
Title	
Business Address	(POST OFFICE BOX NUMBER NOT ACCEPTABLE)
State Telephone Number	Today's Date

PROVIDE THREE (3) SERVICE APPROPRIATE REFERENCES

1. Company Name:
Address:
Contact Name: Phone #
Type of service/product provided to this Company:
Dollar value of service provided to this Company:
2. Company Name: Address: Contact Name: Phone # Type of service/product provided to this Company:
Dollar value of service provided to this Company:
3. Company Name: Address: Contact Name: Phone # Type of service/product provided to this Company:
Dollar value of service provided to this Company:
NOTE
Failure to submit any of the required documents, in this or in other sections, with your bid

response package will be cause for the disqualification of your company.

WEEKLY PAYROLL RECORDS REPORT & STATEMENT OF COMPLIANCE

In accordance with Massachusetts General Law c. 149, §27B, a true and accurate record must be kept of all persons employed on the public works project for which the enclosed rates have been provided, A Payroll Form has been printed on the reverse of this page and includes all the information required to be kept by law. Every contractor or subcontractor is required to keep these records and preserve them for a period of three years from the date of completion of the contract.

In addition, every contractor and subcontractor is required to submit, on a weekly basis, a copy of his or her weekly payroll records to the awarding authority. For every week in which an apprentice is employed, a photocopy of the apprentice's identification card must be attached to the payroll report. Once collected, the awarding authority is also required to preserve those reports for three years.

In addition, each such contractor, subcontractor, or public body shall furnish to the awarding authority directly, within fifteen days after completion of its portion of the work, a statement, executed by the contractor, subcontractor or public body who supervises the payment of wages, in the following form:

WEEKLY PAYROLL REPORT FORM

			1 1			Prin Sub	Prime Contractor Subcontractor	ractor				3.			
			1			<u>.</u>	st Prim	e Contr	ractor:						
			1			3	ciiipioyer Signature:	oignai	in in				I		
						Pr	Print Name & Title:	re & T	itle:				Ĭ		
ll ta	Work Classification		- "	Hours	Hours Worked	72			(F)	(B) Hourly	Employ	Employer Contributions	utions	(F) [B+C+D+E] Hourly	(G) [A*F] Weekly
	100	S	X	F	≥	-	rr.	S	Tot. Hrs.	Base	(C) Health & Welfare	(D) Pension	(E) Supp. Unemp.	Total Wage (prev. wage)	Total
			-												
		-						-							
	·														
		-													
			-	-											

NOTE: Every contractor and subcontractor is required to submit a copy of their weekly payroll records to the awarding authority.

RIGHT TO KNOW LAW

Any vendor who receives an order or orders resulting from this invitation agrees to submit a Material Safety Data Sheet (MSDS) for each toxic or hazardous substance or mixture containing such substance, pursuant to M.G.L. c. 111F, §§8,9 and 10 and the regulations contained in 441 CMR 21.06 when deliveries are made. The vendor agrees to deliver all containers properly labeled pursuant to M.G.L. c. 111F §7 and regulations contained in 441 CMR 21.05. Failure to furnish MSDS and/or labels on each container may result in civil or criminal penalties, including bid debarment and action to prevent the vendor from selling said substances, or mixtures containing said substances within the Commonwealth. All vendors furnishing substances or mixtures subject to Chapter 111F or M.G.L. are cautioned to obtain and read the laws, rules and regulations referenced above. Copies may be obtained from the State House Bookstore, Secretary of State, State House, Room 117, Boston, MA (617) 727-2834.

Authorized Signature Indicating Compliance v	vith the Right-to-know laws:
Signature	Date
Print Name	

NOTE

Failure to submit any of the required documents, in this or in other sections, with your bid response package may cause the disqualification of your proposal.

DEBARMENT CERTIFICATION

In connection with this bid and all procurement transactions, by signature thereon, the respondent certifies that neither the company nor its principals are suspended, debarred, proposed for debarment, declared ineligible, or voluntarily excluded from the award of contracts, procurement or non procurement programs from the Commonwealth of Massachusetts, the US Federal Government and /or the City of Waltham. "Principals" means officers, directors, owners, partners and persons having primary interest, management or supervisory responsibilities with the business entity. Vendors shall provide immediate written notification to the Purchasing Agent of the City of Waltham at any time during the period of the contract of prior to the contract award if the vendor learns of any changed condition with regards to the debarment of the company or its officers. This certification is a material representation of fact upon which reliance will be placed when making the business award. If at any time it is determined that the vendor knowingly misrepresented this certification, in addition to other legal remedies available to the city of Waltham, the contract will be cancelled and the award revoked.

Company Name		
Address		
		, Zip Code
Phone Number ())	
E-Mail Address		
Signed by Authorized	Company Representative:	
Print name		
Date		

10 HOURS OSHA TRAINING CONFIRMATION

Chapter 306 of the Acts of 2004

CONSTRUCTION PROJECTS

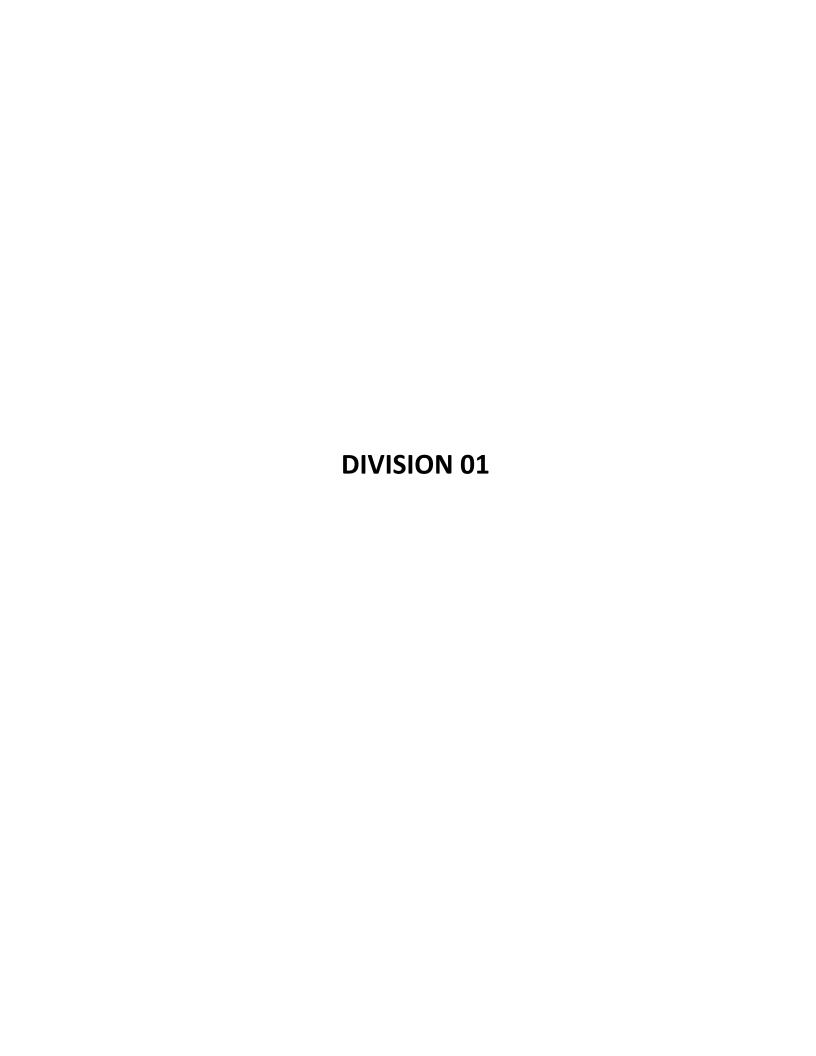
AN ACT RELATIVE TO THE HEALTH AND SAFETY ON PUBLIC

The undersigned hereby certifies that all employees to be employed at a worksite for construction, reconstruction, alteration, remodeling, repair, installation, demolition, maintenance or repair of any public work or any public building estimated to cost more than \$10,000.00 have successfully completed a course in construction safety and health approved by the **United States Occupational Safety and Health Administration** that is at least **10 hours** in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first payroll report for each employee and will comply with all laws and regulations applicable to awards of subcontracts subject to section 44F.

Company Name:	
Address:	
Signature:	
Title:	_
Print Name	-
Date	
See Chapter 306 of the Acts of 2004	

NOTE

Failure to submit any of the required documents, in this or in other sections, with your bid response package will be cause for the disqualification of your company.



SUMMARY OF WORK

PART 1- GENERAL:

1.01 PROJECT DESCRIPTION

The project is for the Infield Renovations, McCabe Playground & Nipper Maher Park as described in the Contract Documents.

1.02 CONTRACT TIME

- A. The work of this contract shall be completed 60 days from the date of the Notice-to-Proceed.
- B. The project shall start no sooner than July 6, 2020
- C. The Contractor shall submit shop drawings, data and samples or place his/her order sufficiently early to permit consideration and approval by the City before materials are necessary for incorporation into the Work. Any delay resulting from the Contractor's failure to do so shall not be used as a basis of a claim against the Owner.

1.03 CONTRACT DOCUMENTS

The Contract Documents are enumerated in the Agreement, and include these Specifications and the Drawings, as prepared for City of Waltham, by Beals and Thomas Inc

1.04 INSPECTION OF THE SITE

Although it is not required of interested parties to visit the sites, the City encourages becoming familiar with the sites. It is the Contractor responsibility to obtain all information pertaining this project prior to bidding. By submitting a bid the company confirms that it is thoroughly familiar with the site and all existing conditions which impact and affect the work. Requests for extra compensation will not be considered for any work which could have been foreseen by a visual inspection of the site.

1.05 CONTRACTOR'S USE OF THE SITE

- A. The contractor will have full access to the site shown within the Contract Limit of Work Line.
 - 1. The Contractor, his/her Subcontractors, and their employees may park on the site inside the Contract Limit of Work Line, given that no such on-site parking interferes with the site work.
 - 2. The Contractor shall furnish his/her own toilet facilities on-site.
- B. The Contractor shall take all precautions necessary to protect all abutting properties during construction. Any and all damage caused by construction operations shall be repaired.
 - The project site shall be kept clean and free from accumulation of waste material and debris.

01010-1 SUMMARY OF WORK 2. The Contractor, his/her Subcontractors, and their employees shall be respectful and courteous of the neighborhood while working on site.

1.06 ENCLOSURES

Provide at the earliest practical time temporary enclosure of materials, work in progress and completed portions of the work to provide protection to the work and the employees.

1.07 SAFETY AND SECURITY

- A. The Contractor shall be responsible for the safety and security of the site within the Contract Limit of Work Line and for the safety of all persons who enter within the Contract Limit of Work Line.
- B. The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions & programs in connection with the work. He/she shall promulgate safety regulations and shall notify the Owner of particular hazards.
- C. The Contractor shall erect and maintain, as required by existing conditions and progress of work, all reasonable safeguards for safety and security. This includes the construction of barriers and the posting of danger signs and other warnings against hazards. By these and other necessary methods the Contractor shall stop unauthorized entry within the Contract Limit of Work Line.
- D. The Contractor shall cooperate with and maintain a close liaison with the Police Department and Fire Department, and he/she shall abide by safety or security related requests from any of these authorities.

1.08 WORK TO BE DONE

The work of this Contract includes construction of Park Improvements as indicated on the construction plans located within the confines of McCabe Playground & Nipper Maher Park.

MEASUREMENT AND PAYMENT

PART 1 - GENERAL:

1.01 BASE BID

A. Measurement

1. Measurement for payment of Infield Renovations, McCabe Playground & Nipper Maher Park, shall be on a lump-sum basis.

B. Payment

- 1. Payment of the lump-sum price under the Base Bid of the Proposal shall fully compensate the Contractor for furnishing all labor, materials, equipment and incidentals required for work described in Section 01010, SUMMARY OF WORK of these Specifications.
- 2. Contractor shall submit substantiated estimates for payment in an approved form at monthly intervals or when mutually agreed by Contractor and City.

1.02 ADDITIONAL WORK

- A. Increases or decreases in the quantities of certain classes of work, when ordered or approved in writing by the City.
- B. Additional Work, if any shall be performed at a mutually satisfactory price agreed upon between the City and Contractor.

CHANGE ORDER PROCEDURE

PART 1 - GENERAL:

1.01 GENERAL PROVISIONS

Attention is directed to the General Conditions of the Contract, all Divisions of the specifications, and the Contract Drawings, all of which apply to work of this section.

1.02 SCOPE OF WORK

Work included: Make such changes in the Work, in the Contract Sum, in the Contract Time of Completion, or any combination thereof, as are described in written Change Orders signed by the Owner and issued after execution of the Contract, in accordance with the provisions of this Section.

1.03 QUALITY ASSURANCE

Include within the Contractor's quality assurance program such measures as are needed to assure familiarity of the Contractor's staff and employees with these procedures for processing Change Order data.

1.04 SUBMITTALS

- A. Make submittals directly to the City at the address shown on the Project Manual.
- B. Submit the number of copies of required items requested stated in Section 01300, SUBMITTALS.

1.05 PRODUCT HANDLING

- A. Maintain a "Register of Bulletins and Change Orders" at the job Site, accurately reflecting current status of all pertinent data.
- B. Make the Register available to the City for review at his/her request.

1.06 PROCESSING CHANGES INITIATED BY THE OWNER

- A. Should the City contemplate making a change in the Work or a change in the Contract Time of Completion, the Architect will issue a "Bulletin" to the Contractor.
 - 1. Bulletins will be dated and will be numbered in sequence.
 - 2. The Bulletin will describe the contemplated change, and will carry one of the following instructions to the Contractor:

- a. Make the described change in the Work at no change in the Contract Sum and no change in the Contract Time of Completion.
- Make the described change in the Work, credit or cost for which will be determined in accordance with pertinent paragraphs of the General Conditions.
- Promptly advise the City as to credit or cost proposed for the described change. This is not an authorization to proceed with the change.
- B. If the Contractor has been directed by the City to make the described change in the Work at no change in the Contract Sum and no change in the Contract Time of Completion, but the Contractor wishes to make a claim for one or both of such changes, the Contractor shall proceed with the change and shall notify the City.
- C. If the Contractor has been directed by the City to make the described change subject to later determination of cost or credit, the Contractor shall:
 - 1. Take such measures as needed to make the change.
 - 2. Consult with the City and reach agreement on the most appropriate method for determining credit or cost for the change.
- D. If the Contractor has been directed by the City to promptly advise him as to credit or cost proposed for the described change, the Contractor shall:
 - 1. Analyze the described change and its impact on costs and time.
 - 2. Secure the required information and forward it to the City for review.
 - 3. Meet with the City as required to explain costs and, when appropriate, determine other acceptable ways to achieve the desired objective.
 - 4. Alert pertinent personnel and subcontractors as to the impending change and, to the maximum extent possible, avoid such work as would increase the Owner's cost for making the change, advising the City in writing when such avoidance no longer is practicable.

1.07 PROCESSING CHANGES INITIATED BY THE CONTRACTOR

A. Should the Contractor discover a discrepancy among the Contract Documents, a concealed condition, or other cause for suggesting a change in the Work, a change in the Contract Sum, or a change in the Contract Time of Completion, he shall notify the City.

B. Upon agreement by the City that there is reasonable cause to consider the Contractor's proposed change, the City will issue a Bulletin in accordance with the provisions described in Article 1.05 above.

1.08 PROCESSING BULLETINS

- A. Contractor shall make written reply to the City in response to each Bulletin.
 - 1. State proposed change in the Contract Sum, if any.
 - 2. State proposed change in the Contract Time of Completion, if any.
 - 3. Clearly describe other changes in the Work required by the proposed change, or desirable therewith, if any.
 - 4. Include full backup data such as subcontractor's letter of bid or similar information.
 - 5. Submit this response in single copy.
- B. When cost or credit for the change has been agreed upon by the Owner and the Contractor, or the Owner have directed that cost or credit be determined in accordance with the Contract, the City will issue a "Change Order" to the Contractor.

1.09 PROCESSING CHANGE ORDERS

- A. Change Orders will be dated and will be numbered in sequence.
- B. The Change Order will describe the change or changes, will refer to the Bulletin or Bulletins involved, and will be signed by the Owner.
- C. The City will issue four copies of each Change Order to the Contractor.
 - 1. The Contractor promptly shall sign all four copies and return three copies to the City.
- D. Should the Contractor disagree with the stipulated change in Contract Sum or change in Contract Time of Completion, or both:
 - The Contractor promptly shall return three copies of the Change Order, unsigned by him, to the City with a letter signed by the Contractor and stating the reason or reasons for the Contractor's disagreement.
 - 2. The Contractor's disagreement with the Change Order shall not in any way relieve the Contractor of his/her responsibility to proceed with the change as

ordered and to seek settlement of the dispute under pertinent provisions of the Contract Documents.

1.10 CITY ORDINANCE. APPROVAL OF CONTRACTS BY MAYOR, SEC. 3-12 OF THE CITY ORDINANCES.

All contract made by any department, board or commission where the amount involved is two thousand dollars (\$2,000) or more shall be in writing, and no such contract shall be deemed to have been made or executed until the approval of the Mayor is affixed thereto. Any construction contract shall, and all other contracts may, where the contract exceed five thousand dollars (\$5,000) be required to be accompanied by a bond with sureties satisfactory to the Mayor.

1.11 BID OPENING INCLEMENT WEATHER

If, at the time of the originally scheduled bid opening, City Hall is closed to inclement weather or another unforeseeable event, the bid opening will be extended until 2:00 PM on the next normal business day. Bids will be accepted until that date and time.

1.12 CITY ORDINANCE. APPROVAL OF CONTRACTS BY MAYOR, SEC. 3-12 OF THE CITY ORDINANCES.

All contract made by any department, board or commission where the amount involved is two thousand dollars (\$2,000) or more shall be in writing, and no such contract shall be deemed to have been made or executed until the approval of the Mayor is affixed thereto. Any construction contract shall, and all other contracts may, where the contract exceed five thousand dollars (\$5,000) be required to be accompanied by a bond with sureties satisfactory to the Mayor.

CONTROL OF WORK

PART 1 - GENERAL:

1.01 GENERAL PROVISIONS

Attention is directed to the General Conditions of the Contract, all Divisions of the Specifications and the Contract Drawings, all of which apply to this section.

1.02 PLANT

The Contractor shall furnish plant and equipment which will be efficient, appropriate, and of sufficient quantity to secure a satisfactory quality of work and a rate of progress which will ensure the completion of the Work within the time stipulated in the Contract Documents. If at any time such plant appears to the Owner to be inefficient, inappropriate or insufficient for securing the quality of work required or for producing the rate of progress aforesaid, he may order the Contractor to increase the efficiency, change the character, or increase the plant and equipment, and the Contractor shall conform to such order. Failure of the Owner to give such order shall in no way relieve the Contractor of his obligations to secure the quality of work and rate of progress required. In addition, the Contractor shall maintain his equipment, including mufflers, oil seals or gaskets, and air pollution control devices, in proper working order.

1.03 PROJECT MANAGEMENT

- A. The Work must be completed in a continuous uninterrupted operation. The Contractor must use sufficient labor and equipment to complete all the necessary work requirements within a minimum period of time and as stated in the Contract Documents.
- B. Prior to the start of any work, the Contractor shall submit a Progress Schedule in a bar chart form at the preconstruction meeting to the City for completing the Work. See SECTION 01300, SUBMITTALS of these Specifications.
- C. The Contractor is fully responsible for the security and safety of partially completed work until the Project is finally accepted by the Owner and the City.
- D. Hours of work for construction activities are limited to 7:00 AM to 4:00 PM Monday through Friday. Any changes to the work schedule shall be authorized by the City.
- E. All work areas shall be secured, and materials and equipment shall be removed at the end of each work day.

F. The Contractor shall retain on the Project during its progress, a competent full-time representative. This representative shall not be changed except with the consent of the Owner. The representative shall be in full charge of the Work and all instructions given to him shall be binding.

1.04 SITE INVESTIGATION OF EXISTING CONDITIONS

- A. The Contractor acknowledges that he/she has satisfied him/herself as to the conditions existing at the Site of the Work, the type of equipment required to perform the Work, the quality and the quantity of the materials to be furnished insofar as this information is reasonably ascertainable from an inspection of the Site, as well as from information presented by the Specifications made a part of the Contract. Any failure of the Contractor to acquaint himself/herself with available information will not relieve him from the responsibility for estimating properly the difficulty or cost of successfully performing the Work.
- B. No claim for extra compensation or extension of time will be allowed due to the Contractor's failure to estimate properly the quantities, locations and measurements of all items required to complete the Work.
- C. Report any discrepancies to the City/Engineer and request her/his interpretation.

1.05 OWNER'S COOPERATION

The Owner will furnish the Contractor, without charge, three (3) copies of the Specifications. Additional copies requested by the Contractor will be furnished at cost.

1.06 PROTECTION OF WORK AREA

- A. The Contractor shall secure all work areas by 4:00 PM each work day.
- B. All of the Contractor's equipment, supplies, etc. left on-site, shall be secured daily, in no case shall the Owner assume responsibility for damage or loss of materials and equipment left on site.
- C. The Contractor shall take precautions to prevent injury to the public due to open excavations or excavated materials. All trenches, excavated materials, equipment, or other obstacles which could be dangerous to the public shall be secured in an agreed upon staging area.

1.07 LAWS AND REGULATIONS

A. The Contractor shall keep himself fully informed of all State and Federal laws and Municipal ordinances and regulations in any manner affecting those engaged or employed in the Work, or the materials used 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.

01040-2 CONTROL OF WORK B. If any discrepancy or inconsistency is discovered in the Plans, Specifications, or Contract for the Work in relation to any such laws, ordinances, regulations, orders or decrees, the Contractor shall forthwith report the same to the City in writing. He/she shall at all times himself/herself observe and comply with, and shall cause all his/her agents and employees to observe and comply with all such laws, ordinances, regulations, orders, and decrees, and shall protect and indemnify the Owner and its officers, agents and servants against any claim or liability arising from or based on the violation of any such laws, ordinances, regulations, and orders or decrees, whether by himself/herself or his/her employees or subcontractors.

1.08 PROTECTION OF TREES AND SHRUBS (if applicable)

- A. The Contractor shall take particular care to avoid damage to trees in, along and adjacent to the Work area. Trees shall be protected from injury according to the specifications and the Contract Drawings. No trees or shrubs shall be removed or pruned without the approval of the Owner and the City. The Contractor shall be liable for all damage and/or disturbance to existing trees. Actual penalties for damage to plants shall be in accordance with the schedules defined herein, with assessed damages to be deducted from sums payable under the Construction Contract.
- B. Any measure required for the protection of trees and shrubs shall be considered to be part of the Work to be done under the various divisions of the Work in the Contract, and no separate payment will be made for this Work.

1.09 PERMITS AND CODES

- A. Under this Contract, all work shall be as shown in the Contract Drawings and Specifications and shall comply with applicable codes and regulations at the local, county, state, and federal levels. All labor, materials, equipment and services necessary to make the Work comply with such requirements shall be provided without additional cost to the Owner.
- B. Do not close any street, sidewalk, alley, or passageway as to interfere as little as possible with the use ordinarily made of roads, driveways, alleys, sidewalks, or other facilities near enough to the Work to be affected thereby.
- C. Where code references are given, the latest issue of that Code in effect at the time of bidding shall be used. Code references are given to indicate the minimum quality and performance acceptable. Where Specifications and/or Contract Drawings indicate more stringent requirements, the Specifications or Contract Drawings shall govern.
- D. The Contractor, under this Contract shall be responsible for providing and filing all Plans, Specifications and other documents, pay all requisite fees and secure all permits, inspections and approvals necessary for legal installation and operation of the systems and or equipment furnished under this Contract.
- E. Comply also with applicable provisions of American National Standard Code for Building Construction ANSI A10.6.

1.10 INSPECTION AND TESTS

- A. Under this Contract the Contractor shall conduct and pay for all testing required by the Specifications.
- B. All material and workmanship shall be subject to inspection, examination, by the City at any and all times during construction.
- C. All work that is unsatisfactory, or fails to comply with the Specifications in the opinion of the City, shall be corrected by the Contractor at his own expense to the satisfaction of the City.

1.11 SANITARY REGULATIONS

- A. The Contractor shall provide adequate sanitary facilities for the use of those employed on the Work. Such facilities shall be made available when the first employees arrive on the Site of the Work, shall be properly secluded from public observation, and shall be constructed and maintained during the progress of the Work.
- B. The Contractor shall maintain the sanitary facilities in a satisfactory and sanitary condition at all times and shall enforce their use. He/she shall vigorously prohibit the committing of nuisance on the Site of the Work, on lands of the Owner, or an adjacent property.

1.12 COORDINATION WITH UTILITIES (if Applicable)

- A. The Contractor shall coordinate his/her Work with the utility companies to prevent damages or disruption to existing equipment and to coordinate new utility installations. The Contractor shall contact the utility companies owning underground equipment in the area of his work to prior to commencing excavation. Contact with the utility companies shall be make sufficiently in advance so they can properly locate their equipment.
- B. The Contractor shall contact Dig-Safe (1-888-344-7233) prior to the start of any prior to the start of construction, and obtain a Certificate verifying that the location work has been completed. Contact the City of Waltham Engineer to verify the location of additional on-site utilities.
- C. The contractor shall be responsible for locating all site items such as utilities that could be affected by this Contract prior to the start of construction.
- C. Site information: No representations are made indicating subsurface conditions. It is expressly understood that the Owner will not be responsible for interpretations or conclusions drawn therefrom by the Contractor.

1.13 CONSTRUCTION FENCE

A. The Contractor shall maintain a construction fence installed to secure the Site at all times. Existing fencing may be maintained in place or reused to the extent feasible to satisfy this requirement.

B. Maintain construction fencing in place throughout length of construction period or as directed by the City. After completion of construction, take down construction fencing and remove from the Site. Repair any damage caused by the fence removal, if any.

1.14 FIRE PROTECTION

Gasoline and other flammable liquids shall be stored in and dispensed from UL listed safety containers in conformance with the National Board of Fire Underwriters recommendations. Do not store flammables near buildings. No flammable shall be stored between 4 p.m. and 7 a.m. on workdays; nor anytime on non-workdays.

1.15 CLEAN UP

During the course of the Work, the Contractor shall keep the Site in as clean and neat a condition as possible. He/she shall dispose of all residue resulting from the work. At the conclusion of the day's work, the Contractor shall leave the entire Site of the Work in a neat and orderly condition.

PROJECT MEETINGS

PART 1 - GENERAL:

1.01 GENERAL PROVISIONS

Attention is directed to the General Conditions of the Contract, all Divisions of the specifications, and the Contract Drawings, all of which apply to work of this section.

1.02 SCOPE OF WORK

Work included: To enable orderly review during progress of the Work, and to provide for systematic discussion of problems, as long as deemed necessary by the Owner throughout the construction period.

Related work: The Contractor's relations with his subcontractors and materials suppliers, and discussions relative thereto, are the Contractor's responsibility and normally are not part of Project Meetings content.

1.03 QUALITY ASSURANCE

For those persons designated by the Contractor to attend and participate in Project Meetings, provide required authority to commit the Contractor to solutions agreed upon in the Project Meetings.

1.04 MEETING NOTES

The City will compile minutes of each Project Meeting and will furnish copies to all the attendees, Contractor, and the Owner before next scheduled meeting.

PART 2 - EXECUTION:

2.01 MEETING SCHEDULE

- A. Except as noted below for Preconstruction Meeting, frequency of Project Meetings will be weekly, or as determined by the Owner, depending on work progress.
- B. Coordinate as necessary, to establish mutually acceptable schedule for meetings.

2.02 MEETING LOCATIONS

Project Meetings will be held at the job sites.

2.03 PRE-CONSTRUCTION MEETING

A. The contractor shall arrange for a Preconstruction Meeting within 5 days after the award of contact. The limitations on the use of the premises, as outlined in Section 01010, SUMMARY OF WORK, will be discussed, and the Owner will describe the parking

assignment, delivery procedures, toilet facilities, and other provisions he/she may wish to establish.

- B. Contractor is to coordinate attendance by authorized representatives of the Owner, the Contractor, site work subcontractors, and the City.
- C. Minimum agenda: Data will be distributed and discussed on at least the following items:
 - 1. Organizational arrangement of Contractor's forces and personnel, and those of subcontractors, materials suppliers, and Owner.
 - 2. Channels and procedures for communication.
 - 3. Construction schedule, including sequence of critical work.
 - 4. Contract Documents and revisions.
 - 5. Processing of Shop Drawings and other data submitted to the Owner for review.
 - 6. Processing of Bulletins, field decisions, and Change Orders.
 - 7. Procedures for safety, first aid, security, quality control, housekeeping, and related matters.
 - 8. Submittal of Construction Fence layout.
 - 9. Submittal of Progress Schedule, Tabulation of Submittals and
 - 10. Schedule of Values.

2.04 PROJECT MEETINGS

- A. Frequency: Project Meetings shall, in general, be held once a week. Meetings shall be chaired by the City, who will also prepare the meeting agenda issued prior to the meeting.
- B. Attendance:
 - To the maximum extent practicable, assign the same person or persons to represent the Contractor at Project Meetings throughout progress of the Work.
 - 2. Site work subcontractors, material suppliers, and others may be required to attend those Project Meetings in which their aspect of the Work is involved.
- C. Minimum agenda:
 - 1. Review progress of the Work since last meeting, including status of submittals for approval.

- 2. Identify problems which impede planned progress.
- 3. Develop corrective measures and procedures to regain planned schedule.
- 4. Complete other current business.

D. Revisions to Minutes:

- Unless published minutes are challenged in writing prior to the next regularly scheduled Project Meeting, they will be accepted as properly stating the activities and decisions of the meeting.
- 2. Persons challenging published minutes shall reproduce and distribute copies of the challenge to all indicated recipients of the particular set of minutes.
- 3. Challenge to minutes shall be settled at start of the next regularly scheduled meeting.

QUALITY CONTROL

PART 1 - GENERAL:

1.01 GENERAL PROVISIONS

Attention is directed to the General Conditions of the Contract, all Divisions of the Specifications and the Drawings, all of which apply to this section.

1.02. SCOPE OF WORK

A. The scope of the work under this Specification section, without limiting the generality thereof, includes the furnishing of all labor, materials, equipment, services, and incidentals necessary to complete all of the work in accordance with the Contract Documents, which are intended to describe and provide for a finished piece of work.

1.03. TESTING LABORATORY (if applicable)

- A. The Owner will select, engage, and pay for the services of an independent testing laboratory to perform structural tests on concrete and such other materials as the City may deem appropriate.
- B. Retesting of materials which fail the original test shall be paid for by the Contractor.

TEMPORARY FACILITIES

PART 1 - GENERAL:

1.01 GENERAL PROVISIONS

Attention is directed to the General Conditions of the Contract, all Divisions of the Specifications and the Contract Drawings, all of which apply to this section.

1.02 SCOPE OF WORK

- A. The scope of the work under this Specification section, without limiting the generality thereof, includes the furnishing of all labor, materials, equipment, services, and incidentals necessary to complete all of the work in accordance with the Contract Documents, which are intended to describe and provide for a finished piece of work.
- B. The work includes the following, without limiting the generality thereof;
 - 1. Temporary utilities.
 - 2. Field office (not required).
 - 3. Barriers and enclosures.
 - 4. Safety and security.

1.03 TEMPORARY UTILITIES

- A. The Contractor is responsible for all temporary electrical distribution, lighting, and water distribution from existing sources.
- B. The Contractor shall provide and pay for his own temporary telephone service within the Contract Limit Line.
- C. The provision for temporary toilets is included under Section 01010 SUMMARY OF WORK.

1.04 FIELD OFFICE

- A. The contractor is responsible for his/her own office space, if deemed necessary.
- B. The Contractor shall provide appropriate survey equipment on site for use by the Engineer, field checking layouts and installations.

1.05 BARRIERS AND ENCLOSURES

A. The Contractor shall maintain the construction fence and furnish warning signs around the work area to limit unauthorized entry within the Contract Limit Line.

B. At the earliest practical time provide temporary enclosure of materials, equipment, work in progress and completed portions of the work to provide protection to the work and employees.

1.06 SAFETY AND SECURITY

- A. The Contractor shall be responsible for the safety and security of the building and the site within the Contract Limit Line, and for the safety of all persons who enter within the Contract Limit Line.
- B. The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work.
- C. The Contractor shall erect and maintain, as required by existing conditions and progress of the work, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations, and notifying the Owner of particular hazards.
- D. The Contractor shall cooperate with and maintain a close liaison with the Police Department and Fire Department, and he shall abide by safety-related requests from any of these agencies.

CONSTRUCTION LAYOUT

PART I - GENERAL

1.01 SCOPE OF WORK

- A. The work under this section shall consist of field staking the horizontal and vertical alignment of all essential features. The Contractor shall familiarize himself with the existing conditions and shall be responsible for locating or re-establishing survey field ties, property lines, and benchmarks indicated on the plans.
- B. Existing survey tie information, if available, shall be provided by the City upon request.
- C. The individual retained to perform the work of this Section shall be as approved by the City Representative.

PART II - MATERIALS

2.01 LAYOUT AND STAKING

- A. The Contractor shall be responsible for furnishing all stakes, pins, and grade markings as required to implement the work of layout and staking and shall make all field adjustments ordered by the Project Representative at no extra cost to the Owner.
- B. Upon request by the Project Representative, the Contractor shall make available to the Owner survey instruments necessary to check the proposed vertical and horizontal alignments at no extra cost.

PART III - EXECUTION

3.01 SURVEY LAYOUT

- A. The Contractor shall use the alignments shown on the plans to establish the layout of all proposed features and shall perform field adjustments as ordered by the Project Representative.
- B. The Surveyor shall lay out the essential or necessary grades and locations of all proposed site elements. The surveyor shall verify the location of any existing spikes, stakes, pipes, drill holes, etc. and shall be responsible for their accuracy. Proposed features shall be located in relation to dimensions shown on the drawings and as adjusted by the Project Representative.
- C. The Contractor shall inform the Project Representative when the general layout is completed and shall not begin excavation until the Project Representative approves the various alignments. Any discrepancies encountered in field conditions shall be reported to the Project Representative immediately and shall be adjusted as directed.

D. The Contractor shall be responsible for maintaining the correct vertical and horizontal alignment of all elements, which responsibility shall not be waived by the Project Representative's approval of basic layout and stakeout.

PROJECT CLOSE-OUT

PART 1 - GENERAL:

1.01 GENERAL PROVISIONS

Attention is directed to the General Conditions of the Contract, all Divisions of the Specifications and the Drawings, all of which apply to this section.

1.02. SCOPE OF WORK

- A. The scope of work under this specification section, without limiting the generality thereof, includes the furnishing of all labor, materials, equipment, services, incidentals necessary to complete all of the work in accordance with the Contract Documents, which are intended to describe and provide for a finished piece of work.
- B. The type of work includes the following, without limiting the generality thereof:
 - 1. Substantial completion
 - 2. Final cleaning.
 - 3. Record drawings.
 - 4. Operating and maintenance data.
 - Warranties.
 - 6. Maintenance materials.
 - 7. Final completion.

1.03 SUBSTANTIAL COMPLETION

- A. Prior to requesting Substantial Completion as provided in the General Conditions the Contractor shall make a thorough inspection of the Work. During this inspection the Contractor shall prepare a comprehensive list of all items remaining to be completed or corrected. This list shall include all remaining Contractor and Subcontractor items to be provided under the Contract Documents.
- B. Upon completion of the list, the Contractor shall notify, the City in writing, that the Work is Substantially Complete. The City shall then conduct a thorough inspection. If the City agrees that the Work is Substantially Complete, the City will promptly make a prepare a monetized punch list, setting forth in accurate detail any items on the Contractor's list and additional items that are not acceptable or incomplete. The Contractor shall coordinate all Subcontractors to achieve prompt completion of the punch list.
- C. The Contractor shall not be relieved of the responsibility to provide Contract items left off of the Landscape Architect's punch list.
- D. If the City determines that the Work is not Substantially Complete, the City shall inform the Contractor of those items that must be completed

before the City will prepare a monetized punch list. Upon completion of those items, the Contractor shall again request the City to prepare a punch list.

- E. When the punch list has been prepared, the City will arrange a meeting with the Contractor and Subcontractors to identify and explain all punch list items and answer questions on work which must be done before final acceptance.
- F. The City may revise the punch list, from time to time, to ensure that all items of Work are properly completed.

1.04 FINAL CLEANING

- A. Immediately prior to Substantial Completion of the work, the Contractor shall perform all cleanup work as follows:
 - 1. Remove all waste materials and rubbish from the site and legally dispose of it.
 - 2. Remove all tools, equipment, machinery, surplus material, temporary enclosures, and any other material belonging to the Contractor or his Subcontractors.
 - 3. Clean all surfaces, fixtures, and equipment within the work areas, and any surfaces outside the work area which have been made dirty by the work of the contract. Leave the entire site clean and ready for use.

1.05 RECORD DRAWINGS/AS-BUILT DRAWINGS

- A. During the course of the work the Contractor shall maintain, at the site, a clean set of black line prints of the contract drawings. This set of prints will be marked "Record Drawings" and shall be kept in a clean condition and separate from the drawings in general reference use. On these record drawings, the Contractor shall record all deviations from the work as described in the contract drawings, especially those deviations in utilities work.
- B. At the completion of the work, neat, clean and complete record drawings shall be prepared and submitted to the Owner as a condition precedent to final payment. At his own expense the Contractor shall obtain reproducibles of working drawing sheets from the Owner.

1.06 OPERATING AND MAINTENANCE DATA

At substantial completion of the project, the Contractor shall deliver to the Owner two sets of all operating and maintenance instructions for the various pieces of equipment or paints included in the project. This information shall be neatly bound in loose leaf notebooks for the Owner's permanent record.

1.07 WARRANTIES

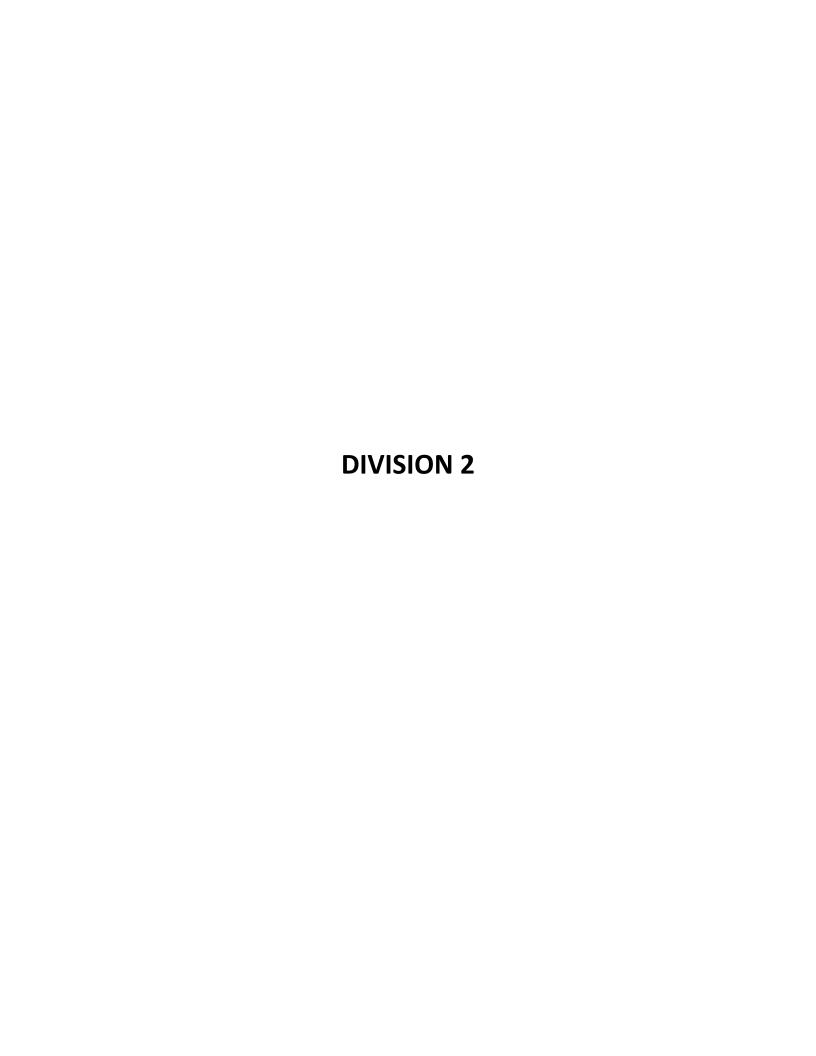
At substantial completion of the project, the Contractor shall deliver to the City copies of all warranties for the various materials and pieces of equipment included in the project. These warranties shall be submitted in duplicate and shall be bound together with the operating and maintenance data called for above.

1.08 FINAL COMPLETION

A. Related Requirements: The Contractor's attention is directed to the General Conditions of the Contract.

B. Final Completion:

- Within 10 days after Substantial Completion, if any of the items on the Landscape Architect's punch list are not complete or if the Contractor has not provided the appropriate Record Drawings, Operating Manuals, Warranties, Guarantees, or Spare Parts, the City shall assign a monetary value for each incomplete item as well as any other items as provided by M.G.L. c.30 sec.39K.
- 2. The Contractor shall provide the City with a Notarized Contractor's Certificate and Release and an appropriate Application for Payment. This Application shall be for an amount equal to the remaining balance of the Contract less the amount of the Landscape Architect's monetized punch list and any other items as provided under M.G.L. c.30 sec.39K.
- 3. The Contractor shall complete all remaining Work in accordance with the provisions of the General Conditions.
- 4. Upon completion of all remaining items, and after receipt of all appropriate Record Drawings, Operating Manuals, Warranties, Guarantees and Spare Parts required by the Contract Documents, The Contractor shall provide a notarized Contractor's Certificate and Release and a final Application for Payment to complement this close-out process.
- 5. The Contractor shall provide copies of Lien Waivers for all subcontractors and suppliers to obtain final payment. No final payment or release of retainage shall be made without notarized copies of all Lien Waivers for the completed project.



Technical
Specification
by Beals and
Thomas

TECHNICAL SPECIFICATIONS INFIELD RENOVATIONS Monsignor McCabe Playground and Nipper Maher Park Waltham, Massachusetts 02452

Prepared for:

The City of Waltham 610 Main Street Waltham, Massachusetts 02452

Prepared by:

BEALS AND THOMAS, INC Reservoir Corporate Center 144 Turnpike Road (Route 9) Southborough, MA 01772-2104

Issue Date: 01/24/2020 B+T Job Number: 3150.00

SECTIONS INCLUDED

SECTION 021050 - RODENT CONTROL SECTION 321523 - NATURAL BASEBALL INFIELD RENOVATIONS

SECTION 021050 - RODENT CONTOL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This section specifies rodent control and general pest control requirements within project areas, and bordering areas as designated by the City. This work is to be performed prior to demolition, excavation, and site preparation and throughout the Contract, so that rodents (rats, and mice) and other pests do not disperse from or infest the project area.
- B. The Contractor shall develop and implement an Integrated Pest Management (IPM) approach. As part of that approach, the Contractor shall maintain a cooperative dialogue with appropriate agencies and management/representatives of neighboring properties.
- C. The Contractor shall perform the rodent control tasks described in this Scope of Work and also respond to other pest control needs when directed by the City.

1.3 SUBMITTALS

- A. Submit to the City copies of pesticide applicator certifications and licenses within ten (10) days of their issuance or renewal for the duration of this Contract.
- B. After performing the survey described herein Section 3.1 and before initiating baiting, submit to the City a written description of proposed pest control procedures, indicating materials, quantities, methods, and time schedule. For all pesticides to be used, submit a copy of the pesticide manufacturer's EPA-approved pesticide label with application directions.
- C. Submit to the City documentation of pest control activities and results as follows:
 - 1. Weekly –Submit data sheets with locations of sites treated, amounts and types of pesticide used, number and types of traps set, survey and inspection results, sanitation conditions, complaint calls investigated, and any problem that occurred.
 - 2. Monthly Submit a written summary that includes determinable results of the IPM program and recommendations.
 - 3. Quarterly Submit a map that shows bait stations where rodent baits are being maintained.

1.4 QUALITY ASSURANCE

- A. The Contractor shall perform this work at all times in accordance with the following minimum standards and as acceptable to the City:
 - The Contractor and key personnel shall have experience with commercial and residential accounts and construction projects; have experience and technical training in vertebrate pest management and integrated pest management; have experience with various rodent control techniques, equipment, and strategies; have training and experience with insect control; and have knowledge of and experience with techniques to reduce non-target hazards.
 - 2. The supervisor shall be licensed and certified by the Massachusetts Pesticide Bureau and certified in General Pest Control (category 41) and Vertebrate Pest Control (category 44). The supervisor shall have specific training and experience in vertebrate pest management, commercial rodent control, general pest control, and integrated pest management.
 - 3. Applicators shall be licensed by the Massachusetts Pesticide Bureau and certified in General Pest Control (category 41). Applicators shall have specific training and experience in commercial rodent control and integrated pest management.

1.5 COORDINATION

- A. Perform this Work in cooperation with the other Work performed under the Contract.
- B. Initiate the work on or before field mobilization begins for the Contract and with adequate timing to achieve control before environmental disruptions. Provide a maintenance program until Contract is completed and all equipment and materials are removed.
- C. Perform this work in such a manner that toxicant or other control tools do not pose a hazard to persons, domestic animals, or non-target wildlife.

1.6 PERMITS

- A. Obtain and maintain in coordination with the Contractor appropriate permit(s) from city or state agencies for pest control activities associated with this Work.
- B. Obtain and maintain in coordination with the Contractor all right of entry permits required for the performance of the Work. This includes all utilities and private properties to which entrance is required.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Furnish and use only pesticide formulation registered by the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Food and Agriculture, where appropriate according to label directions and as acceptable to the City.
- B. Furnish and use devices and supplies (e.g., traps and bait station) to facilitate the management and effectiveness of the pest control program, where appropriate and as acceptable to the City.

PART 3 - EXECUTION

3.1 SURVEY

- A. Prior to baiting, survey the proposed construction area and accessible or observable bordering areas designated on the plans and record signs of rodent activity and sanitation conditions. Closely inspect all embankments, edge areas, and properties within and abutting the construction area. Maintain survey records in the manner described in Section 3.9.
- B. Thoroughly inspect the construction area and accessible or observable bordering areas and any nearby areas for rodent activity and sanitation deficiencies weekly throughout the duration of this Contract and in accordance with the work schedule. Maintain inspection records in the manner described in Section 3.9.
- C. Plan the control program and allocate resources based on survey and inspection data and as acceptable to the City. Pest control areas designated on the Plans are approximate and the Contractor shall extend services beyond those areas as required based on survey and inspection data.

3.2 APPLICATION FOR RODENT CONTROL

- A. Apply rodenticide in strict accordance with EPA-approved label directions and the Rules and Regulations of the Massachusetts Department of Food and Agriculture. Maintain records of all bait placements in the manner described in 3.7.
- B. Where appropriate, especially for surface placements of rodent baits, use properly secured and tamper-resistant bait stations consistent with EPA regulation. Individually number and properly identify all bait stations.

3.3 SURFACE APPLICATIONS

A. Initial Surface Baiting

1. Rid the construction area of all detectable rodents before construction begins, or as acceptable to the City. Bait all observable rodent burrows. Install and secure bait stations at regular and appropriate intervals and locations, and document rodent activity (burrows, droppings, bait consumed, dead rodents). Replenish bait and shift bait stations as necessary to ensure complete control of rodent populations. Bait edge and accessible bordering areas designated on the Plans as necessary to ensure that rodents will not be dispersed by construction activities and that rodents will not infest work areas.

3.4 MAINTENANCE SURFACE BAITING

A. Establish a maintenance baiting program prior to mobilization by the Contractor, including construction areas and accessible bordering areas designated on the plans, as acceptable to the City. Check bait placements weekly. Use survey and baiting data to determine the most effective distribution of baiting locations and bait quantities. Shift and distribute bait and bait stations as appropriate to ensure continued control.

3.5 CLEAN-UP

- A. Remove visible rodent carcasses and dispose of them daily consistent with the pesticide label directions and applicable codes, laws, and regulations.
- B. Upon completion of any pest control operations at the site, remove remaining bait and dispose of it according to the pesticide label and applicable codes, laws, and regulations. Also remove all wires used for subsurface baiting and any bait stations or traps.

3.6 SANITATION

- A. Prior to construction and throughout the duration of this Contract, identify and document harborage and food sources available to rodents on the construction site and in observable bordering areas designated on the Plans. This includes any littering or improper or insufficient use of trash receptacles in construction areas. It also includes any bordering areas with sanitation conditions or structural deficiencies that violate City or State sanitation codes.
 - 1. Maintain records of sanitation conditions in the manner described in Section 3.9.

3.7 COMPLAINT CALLS

A. During construction, respond to pest-related complaints from the "adjacent" neighborhood i.e. within 200 feet of the project limits, within 12 hours when directed by the City. Inspect the particular premises and adjacent areas for sanitation and structural deficiencies and also signs of historic and recent pest activity. Discuss providing sanitation and structural maintenance information to the adjacent property with the City prior to placing bait and traps. Use pesticides or traps as necessary and appropriate to resolve the complaint when there is a

relationship between the pest infestation and construction activities, or when directed by the City.

B. Maintain records of all complaints investigated, including location, contact person, inspection results, and actions taken. Document the relatedness of the pest infestation to construction activities.

3.8 GENERAL PEST CONTROL

- A. When directed by the City, the Contractor shall determine appropriate methods for any pest control task not specifically identified above and shall submit them in writing to the City for approval in advance. Such pest control tasks would relate to unanticipated pest control needs within construction areas or adjacent areas. This could include control of insects or vertebrates other than rats and mice.
- B. Maintain records of general pest control activities and results n the manner described in Section 3.9

3.9 RECORD KEEPING

A. Use standardized data sheets acceptable to the City to maintain accurate records of date, placement, type, and amount of pesticides or other control tools (e.g., traps) applied. Similarly, maintain records of surveys, inspections, changes in pest activity, sanitation conditions, and complaint calls. Submit data in a format acceptable to the City and as required.

END OF SECTION 021050

SECTION 321823 - NATURAL BASEBALL INFIELD RENOVATIONS

1.0 PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 WORK INCLUDED

- A. Perform all work required to complete the work of the Section, as indicated (See Site Work Exhibit plans for construction limits). Such work includes, but is not limited to, the following:
 - 1. Removal of existing infield mix.
 - 2. Furnishing and installing new infield mix from off-site sources as required to complete this section.
 - 3. Provide proper grading for positive surface drainage.
 - 4. Rebuild pitcher's mound, replace Homeplate, and installation of base anchors.
 - 5. The work of this Section consists of athletic field re-construction at two separate sites, involving removing the existed skinned areas, re-establishing the skinned areas, re-establishing natural grass areas, and related work as shown on the Site Work Exhibit plans or required herein and includes the following:
 - Strip and remove existing infield grass (both locations)
 - Re-grade infield diamond for proper drainage, including foul territory and behind home plate (both locations)
 - Install new infield clay mix (both locations)
 - Re-grade the transition from infield to outfield to create a level playing surface (both locations)
 - Reconstruct pitcher's mound and all baselines (both locations)
 - Relocate any irrigation heads from the infield clay to the outfield turf (both locations)
 - Reestablish all-natural grass rootzone areas that were disturbed during the infield construction. (I.e. the outfield arc, along the baselines, etc.) (both locations)
 - Apply and incorporate rootzone amendments and nutrients as necessary (both locations)
 - Install new sod in areas of prepared athletic field surface including turfgrass maintenance and guarantee (both locations)
 - Fence installation. (Nipper Maher Park only)

- 6. Using existing in-place materials and new materials as needed for grade adjustment, the Contractor shall furnish, and construct infield surfaces to the lines and grades shown on the Site Work Exhibit plans as specified in this Section, including the provision of all materials, labor, tools, equipment and transportation necessary to complete the work.
- 7. In advance of installing the infield mix, the Contractor shall be responsible for skimming and relocation or removal of existing materials if needed.
- 8. When these specifications call for approvals, all approvals shall be by the City.

1.3 SPECIAL CONDITIONS

A. General

- The Contractor shall be solely responsible for complying with all laws and regulations governing the work, including, without limitation, applicable OSHA, EPA and MA state regulations.
- 2. The Contractor shall install temporary construction fencing for entirety of project as indicated on the Site Work Exhibit plans.
- 3. Prospective bidders are to visit the site to verify scope of the work, measurements, quantities, etc., prior to bidding. The City reserves the right to increase or decrease the amount of work if deemed in its best interest.
- 4. Price to include all labor, required materials, tools, equipment, plans, mobilization, contractor expenses (other than those identified in this specification), all testing requirements and permits.
- 5. The Contractor must secure all required licenses and permits (local, state, federal) prior to commencing work on the site. Evidence of, permits, and licenses must be presented to the City prior to commencement of work.
- 6. The Contractor must have staff that possess adequate experience and if required, correct licenses and permits which are up-to-date, appropriate to state regulations and active in the use and operation of the equipment and machinery identified in these specifications, must be presented to the City prior to commencement of work. Contractor shall be in possession of and demonstrate knowledge of the use of the required laser guided finishing equipment.
- 7. The Contractor shall complete all work in a timely manner. All work must be coordinated with the City.
- 8. Completion of work is subject to adverse climatic conditions, which could affect the date of substantial completion. Any/all delays must be communicated with the City as soon as possible.
- 9. The Contractor must provide all labor, equipment, field protection and incidentals required to prepare the sites for infield reconstruction, including pitcher's mound

reconstruction, Homeplate placement, base anchor placement and Rootzone transition reconstruction.

- 10. The Contractor must correct the rootzone material and surface elevations as indicated on the Site Work Exhibit plans to provide an improved, functional, and sustainable playing field surface.
- 11. The Contractor must provide all labor, equipment and incidentals required to prepare the worksite, excavate, transport and install materials, blend and process rootzone, remove stone and undesirable materials from existing rootzone, laser grade at specified intervals, provide satisfactory and acceptable surface water movement.
- 12. The Contractor must construct an acceptable field perimeter transition (acceptable slopes, grades, surface consistency, obstructions, debris, and other elements comprising athletic field building best practices) from the new playing surface to the existing field surrounds (may include but not is not limited to drainage catch basins, valve boxes etc.) and restore any large scale or localized site damage caused by the reconstruction process.
- 13. The Contractor must ensure that existing erosion control and dust control measures are appropriate. If new erosion control and dust mitigation measures are needed, it is the responsibility of the Contractor to install such measurers in accordance with current standards and industry best practices. The City must be notified of any proposed erosion control and dust mitigation measures and must approve them prior to commencing work

B. Work Site

- For improvements to the full-size major-league diamond at Nipper Maher Park, the Contractor shall install and maintain a construction entrance from the abutting parking lot accessible by Dartmouth Street. For improvements to the little league diamond at Monsignor McCabe Playground, the Contractor shall install and maintain a construction entrance from Charlotte Road. All site features, including but not limited to curbing, sidewalk, asphalt, fencing, utilities, and irrigation lines, shall be protected against damage with suitable protective material.
 - If damage is caused during construction, it must be corrected at the contractor's expense to the original condition or better, all repairs must be signed off by the City.
- 2. Nipper Maher Park, at 65 Dartmouth Street, is located in a residential neighborhood. Monsignor McCabe Playground, located at 30 Charlotte Road, is also within a residential neighborhood and abuts the Fitzgerald Elementary School. The excavation, hauling, delivery and placement of material strategies must be submitted by the contractor for approval. Incoming trucks must not idle and must have engines switched off, where possible, if waiting to unload. Trucks waiting for access to the field must allow 50-100 ft. spacing to allow for two-way traffic, and must not block crosswalks, intersections, or driveways. Contractor is responsible for coordinating construction times with the City and with the Fitzgerald Elementary School so as not to interfere with school hours and activities.
- 3. The selected contractor will be responsible for maintaining the work site in a safe and orderly fashion on a daily basis. The contractor is responsible for the proper securing of

all items associated with the project. The contractor is responsible for the removal and disposal of all debris and materials generated from the project. Normal hours of work shall be between the hours of 7:00 AM and 4:00 PM, Monday through Friday, unless otherwise specified. No work shall be performed on Saturdays, Sundays, Holidays or other than normal hours of work without express permission from the City or his designee.

- All materials and equipment must be submitted by the contractor and reviewed and approved by the City or his designee prior to installation and construction.
- Furnish and install only the materials as specified herein in strict accordance with and approval by the manufacturer or distributor and the City.
- Before any work, the contractor must examine and document existing conditions of the fields under contract and their surrounding areas of access under which installation work is to be performed and notify the City of unsatisfactory conditions.
 Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the City.
- Before starting and during work, the contractors shall protect all grounds and access routes to the work site in a manner which will limit unnecessary damage and integrity of the field areas and their work access route.
- Protect the grounds from damage resulting from spillage, dripping, vehicle tire
 rutting, compression and compaction of soils and dropping of materials. Any areas of
 the grounds and field areas which have become damaged and disturbed in a manner
 inconsistent with field condition previous to the
- Clean-up: Remove trash and debris resulting from work at the end of each day's work. Contractor shall dispose of all waste materials off-site.
- Non-prescription drugs and alcoholic beverages are not permitted on the grounds.
- 4. Utilities: Contractor is responsible for contacting Dig Safe before commencement of work.
- 5. Contractor is responsible for having all utilities clearly marked and having all appropriate protections of marked utilities
- 6. Contactor is responsible for damage to any marked utilities.
- 7. Excavation: must not take place when conditions which are detrimental to plant growth are encountered, such as rubble fill, adverse drainage conditions, or obstructions, notify The City before spreading Rootzone.
- 8. Traffic Control: The Contractor shall be responsible for maintenance of traffic and protection of the work site during his work. The Contractor is responsible for notifying the Waltham Police Department 24 hours in advance of working to schedule a police detail if required.
- 9. Before the project commences, if required by the City, all personnel on site must present evidence of a successful CORI check suitable for work in a school zone.

- 10. Planting Restrictions: Plant during one of the following periods. Coordinate planting periods with initial maintenance periods to provide required maintenance from date of Substantial Completion.
 - Spring Planting: March 15th to May 15th
 - Fall Planting: September 15th to December 15th
- 11. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions.

C. Health, Safety and Performance

- The Contractor shall implement all practical means of preventing injury including the
 placement of signs, ropes, barricades or other warning devices to exclude people from
 the work zone.
- 2. If any unauthorized person enters the work area, the Contractor shall cease all operations which could result in injury or accident to the visitor and not restart until the area is cleared.
- 3. The Contractor's personnel working on this project must hold all necessary licenses and permits to perform the work required under this contract as required under the State of Massachusetts Regulations. All work must be done in accordance with applicable industry standards, codes and regulations and/or manufacturer's specifications.
- 4. The Contractor must have at least 5 years of experience in work of this type and size required by this section and which is acceptable to the City of Waltham. The Contractor must supply five (5) references for work of this type (Athletic Fields) with their bid including names and phone numbers of contact.
- 5. Any additional work that is performed beyond this agreement must be approved by the City. The absence of approval from the City will be considered a violation of the contract.
- 6. Contractor must comply with all OSHA Guidelines for safety and protection of workers and the public. The bidder certifies that all employees at the worksite shall have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least ten (10) hours in duration at the time the employee begins work and shall furnish documentation of successful completion of said course. (Certificates Required)

CI. Delivery, Storage, and Protection

 Products and other materials shall be delivered to site at such a time as required for proper coordination of the work. The overall property has minimal storage space and therefore, cannot make accommodations to store materials for an extended period of time.

- 2. The contractor shall arrange material storage so as not to interfere with the City's operations and the welfare of the general public.
- 3. Storage and stockpile areas must be kept clean and free of foreign debris and containments and maintained in a neat and orderly fashion as to not be intrusive to the integrity of the grounds and its users.
- 4. The contractor is responsible for coordinating and receiving all deliveries and shipments.
- 5. The contractor shall retain all delivery receipts and present copies of such receipts and bills of lading to the facilities director or his designee at the end of each work day or at the beginning of the following work day previous to the start of work.
- 6. The contractor shall hold the City harmless from any loss arising from lost, stolen or damaged materials and equipment stored at the job site.
- 7. At the completion of the job, all unused material and rubbish shall be removed from the site. The grounds impacted by delivery and storage shall be clean and all work areas groomed and returned to original condition.

1.4 MATERIAL TESTING

- A. Contractor to provide testing of the existing Rootzone Material and washed screened sand.
- B. Testing shall be performed by an approved soil testing laboratory.
- C. The cost of all testing shall be borne by the Contractor.
- D. The City reserves the right to perform their own testing of all materials.

1.5 SUBMITTALS TO BE PROVIDED DURING PROJECT

- A. Sample Authentication: The City must be present during the sampling of infield clay. Each sample shall consist of a sub-sample taken from a composite of samples taken from cross sections from the top, bottom, and sides of the corresponding stockpile or truck load (A truck load shall be considered a Tri-axel). A one-gallon sample of material in an appropriately labeled and sealed plastic bag or container shall be packaged and sent to an Approved Soil Testing Laboratory. A copy of each submittal and a corresponding split sample shall be delivered to the City.
- B. The Contractor shall provide adequate time in the schedule to account for the sampling, testing and City's subsequent review of all materials prior to spreading operations. Failure of the Contractor to provide materials in a timely manner which meets the specification will not constitute a reason for additional costs or changes to the schedule.
- C. No materials, rootzone, or amendments shall be applied without prior approval of the City.
- D. Certification of Sod:

- 1. Stating the botanical and common name,
- 2. Percentage by weight of each species and variety, and
- 3. Percentage of purity, germination, and weed seed of established sod.
- 4. The date of establishment/seeding and the date of harvesting
- 5. Sod must be harvested no greater than 24 hrs. prior to delivery to site
- E. Provide product Certificates: For infield clay, mound clay, warning track material, topdressing materials, soil fertilizers, soil amendments, from manufacturer for approval by The City
- F. Submit fertilizer recommendation for the rootzone and product information on all soil additives for approval by The City
- G. All documents related to products used in the project necessary to pursue any product warranty claims. (Warranty documents, product labels, installation instructions, purchase receipts, etc.)

1.6 QUALITY ASSURANCE

- A. Contractor Qualifications Contractors shall possess the necessary expertise including equipment and staff experience necessary to construct a high-performance sports field. Shall have membership of one or more of the following Professional associations for a minimum of the last 3 consecutive years.
 - 1. New England Sports Turf Managers Association (NESTMA)
 - 2. Sports Turf Managers Association (STMA)
- B. As part of the bid submission, relevant projects, project references and equipment lists shall be included. The Contractor shall provide reports of Athletic Field projects as to the type of projects involved in, including but not limited to, start and end dates, adherence to set targets and key performance indicators, scope of works completed. The Contactor shall also provide testimonies from previous clients, including but not limited to quality of work, staff/employee interactions, tidiness of site, timekeeping and punctuality and overall client satisfaction levels to the City.
- C. The Contractor must have completed at least three (3) projects per year of similar scope over the past three (3) consecutive years.
- D. The Contractor shall have a supervisor on the site that is experienced in the construction of Athletic Fields and particularly with Baseball/softball infield areas. Supervisor's name, experience, and contact information shall be provided to the City prior to commencement of the Project.
- E. The Contractor shall submit the names of all subcontractors to the City for approval prior to their engagement with the project.
- F. Work under this Section shall be completed by skilled workers who are completely familiar with the specific requirements and methods needed for the proper completion of the work of this Section.

- G. The Contractor shall furnish all labor, materials, equipment, and incidentals, required to complete the work as shown on the Site Work Exhibit plans and specified herein.
- H. Completion of work is subject to adverse climatic conditions, which could affect the date of substantial completion. Any/all delays must be communicated with the City as soon as possible.
- I. The Contractor responsible for the selection of appropriate LGP (low-ground pressure) equipment to carry out all activities outlined herein and subject to approval by the City.
- J. Any materials that are proposed as "equivalent" or "equal" must be approved by the City in advance. All documentation, including specification sheets, such materials must be submitted at least 14 days prior to the date of intended use.
- K. Contractor Is required to submit samples, test results and/or certification of all material prior to delivery to the site. All materials are to be approved by the City prior to their use. These certifications shall comply with specifications and scope of project and where applicable, with any standards that may be implied.
- L. Any defective workmanship shown to be caused by improper or faulty installation shall cause the contractor to correct, repair and/or replace all material and labor at no cost to the school. The contractor will warrant that all workmanship shall be first class and shall be performed by persons trained, qualified and licensed in their respective trades.

1.7 WARRANTY

A. The contractor shall provide a written one-year guarantee against defects in material or workmanship. Warranty period shall commence on the date of project completion. In the event of project failure due to materials and workmanship within one year of project completion, the contractor will be obligated to correct the problem immediately according to specification and the acceptance of the City.

2.0 PART 2 – PRODUCTS

2.1 FIELD CONSTRUCTION EQUIPMENT

- A. Low Ground Pressure (LGP) Construction Equipment to be used throughout the entirety of the project.
- B. The Contractor is responsible for the selection of appropriate LGP (low ground pressure) equipment to carry out all activities outlined herein and subject to approval by the City.

2.2 EROSION AND SEDIMENTATION CONTROL

A. Hay Bales:

1. Air-dried straw, seasoned before baling, free of noxious weeds, weed seeds, and other materials detrimental to plant life.

2. Hardwood Stakes: 1-inch by 1-inch by 3 feet kiln dried hardwood stakes.

B. Silt Fence:

- 1. Amoco 2130[®] Silt Fence or approved equal.
- 2. Wood support posts: Minimum 1-inch by 1-inch by 4 feet kiln dried hardwood posts.

C. Filter Fabric:

- 1. Nonwoven needle-punched geotextile, manufactured for subsurface drainage, made from polypropylene with minimum elongation of 50 percent; complying with the following properties determined according to AASHTO M 288:
 - Survivability: Class 2.
 - Apparent Opening Size: No. 70 sieve, maximum.
 - Permittivity: 1.4 per second, minimum.

D. Filter Bags for Catch Basins

- 1. The following products are appropriate for areas with low sediment loads where hay bale filters or stone filters will obstruct traffic. If high sediment loads are expected Regular Flow Siltsack or equal should be specified.
 - Non-woven polypropylene filter bag manufactured specifically for controlling sediment flow into catch basins.
 - Ultra-DrainGuard® Catch Basin Insert.
 - Siltsack® Hi-Flow,
 - or approved equal.

E. Tree Protection Fencing

1. Plastic Snow Fence: Plastic snow fence as manufactured by The Tensar Corporation, Morrow, Georgia, or an approved equal.

2.3 ROOTZONE

- A. Rootzone for infield turf area shall consist of a sand amended existing rootzone material.
- B. Final Rootzone for infield turf area shall be natural, fertile, friable sandy loam containing not less than 3% or more than 6% by weight, of decayed organic matter (humus), as determined by ASTM F- 1647.
- C. The Rootzone shall contain 84-89% sand with no less than 60% of the total sand falling into the medium through very coarse sand fractions, no more than 15% fine sand, and no more than 10% very fine sand, as determined by ASTM F1632 or D422.
- D. Rootzone shall be free of sub-soil, large stones, earth clods, sticks, stumps, clay lumps, roots or other objectionable, extraneous matter or debris larger than three-eighths inches (3/8) in diameter.
- E. Rootzone shall also be free of Quack grass rhizomes, Agropyron repens, and the nut-like tubers of Nutgrass, Cyperus esculentus, and all other primary noxious weeds.

F. Rootzone shall not have a pH factor of less than 6.0 or greater than 7.0 Rootzone Material not to be delivered or used while in a frozen or muddy condition.

2.4 INFIELD MIX

- A. Skinned infield shall be Dura Edge Classic Infield Mix by Read Custom Soils, Canton, Massachusetts, 888-475-5526, or an approved equal.
- B. Amendments shall be installed in accordance with the Infield Mix manufacturer's recommendations.

2.5 PITCHING MOUND MIX

- A. Shall be clean, dry clay mixed with washed mason-type sand resulting in a weed-free mixture that is reddish brown in color, having a yield of 1.35 tons per cubic yard when placed loose or 1.75 tons per cubic yard when compacted to 85 to 90 percent on a Standard Proctor Test (ASTM D 689-07). Pitching Mound mix shall possess the following particle size analysis:
 - 1. Total Sand Content: 15 to 28 percent
 - 2. Total Clay Content: 30 percent minimum
 - 3. The SCR ratio (silt clay ratio) shall be 0.75 to 1.25
 - 4. No particles shall be greater than 3 millimeters
- B. Material meeting this specification is DuraPitch Premium Mound Clay as manufactured by DuraEdge Products, Inc., Grove City, PA., (866) 867-0052, or an approved equal

2.6 LIME

- A. Lime shall be an approved agricultural limestone containing no less than fifty (50%) percent of total carbonates and twenty-five (25%) percent total magnesium with a neutralizing value of at least one hundred (100%) percent.
- B. The material shall be ground to such a fineness that forty (40%) percent will pass through a Number 100 U.S. Standard Sieve, and ninety-eight (98%) percent will pass through a Number 20 U.S. Standard Sieve.
- C. The lime shall be uniform in composition, dry and free flowing and shall be delivered to the site in the original, unopened containers, each bearing the manufacturer's guaranteed analysis.
- D. Any lime, which becomes caked or otherwise damaged making it unsuitable for use, will be rejected.

2.7 HERBICIDES, PESTICIDES AND FUNGICIDES

A. Herbicides, fungicides, and other pesticides may be used subject to the approval of the City and handled by State Licensed operators only.

2.8 SOD

- A. After the preparation of the areas to be sodded has been approved by the City, the Contractor shall sod the areas as specified herein. The Contractor shall sod with nursery-grown 100% High Quality Certified Kentucky Bluegrass sod.
- B. The sod shall have been grown on a high sand-based soil and contain at least 4 premium Kentucky bluegrass varieties specific to use on athletic fields or equal. All sod must be approved by the City prior to installation. Proof of sod origin grown on high sand base soil must be submitted to the City.Sod varieties must include or equal:
 - 1. 25% Everest Kentucky Bluegrass
 - 2. 25% Blueberry Kentucky Bluegrass
 - 3. 25% Jackpot Kentucky Bluegrass
 - 4. 16% P-105 Kentucky Bluegrass
 - 5. 9% Midnight Kentucky Bluegrass
- C. The sod shall come from a field in which the sod is grown without the use of sod establishment and reinforcements netting and shall have been mowed at a mowing height of a minimum of one and one-half inches (1 %") and a maximum of two inches (2") high.
- D. Sod shall be machine cut at a uniform soil thickness of one-half inch (1/2") +/- one quarter of an inch (1/4"). Measurement for thickness shall exclude top growth and thatch. Sod will be big rolls 62.5' x 4' wide, no split rolls.
- E. The City reserves the right to inspect each roll at the time of delivery. The sod will have a root development that will support its own weight without tearing.
- F. Sod shall be uniform in color, density and thickness.
- G. Sod shall be free of quackgrass, annual bluegrass, bindweed, Canada Thistle, wild onion, Muhlenbergia, bentgrass, Bermuda grass, clover, common broadleaf weeds and plants of varieties than those specified.
- H. The sod producer and installer shall have a minimum of five years' experience.
- I. Submit blend percentages and names to the City for approval. The sod shall be grown by a recognized turf farm which meets the approval of the City.
- J. Sod shall be furnished in either of the following dimensions:
 - 1. Required for large areas of the infield: Full "big Roll" sod. Provided in rectangular sod strips termed consisting of overall dimensions of forty-eight (48) inches wide by a maximum of sixty-three (63) feet long. Stored on specially fabricated heavy-duty tubes furnished by the sod supplier.
 - 2. In rectangular sod strips measuring twelve (12) inches or sixteen (16) inches in width and from four (4) feet or six (6) feet in length, stored in rolls with the grass top side inverted so that the topsoil side is to the exterior. Note: These smaller strips will only be acceptable for filling in smaller areas if needed.

- K. All sod furnished shall be living sod containing at least seventy percent (70%) of thickly matted grasses as specified, and free from noxious weeds.
- L. Any sod with growth of more than two (2) inches in height shall be mowed to a height of from one and one-half (1 ½) to two (2) inches not more than five (5) days prior to harvesting. The sod shall be machine cut at a uniform soil thickness of from one-half (1/2) to three-quarter (3/4) inches, excluding top growth and thatch at time of cutting. The maximum allowable deviation from the widths and lengths specified shall be five percent (5%). No broken pads or torn and uneven ends shall be accepted. Standard size sections of sod shall be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper eighteen percent (18%) of the section. Sod shall not be harvested when its moisture content (excessively wet or dry) may adversely affect its survival.
- M. Thatch thickness shall not exceed one half of an inch (1/2).

2.9 PITCHER'S RUBBER, HOMEPLATE AND BASES

- A. The pitching rubber shall be 6"x24" and be a 4-sided rotatable type with PVC inner core as manufactured by:
 - 1. Schutt 4-sided pitching rubber
 - 2. Champion Pro 4-way pitching rubber
 - 3. Or equal
- B. Bases shall be 15"x15"x3" Hollywood Pro Style bases as manufactured by:
 - 1. Schutt Pro Hollywood Style
 - 2. JayPro Pro-Style Original Jack Corbett Base (BB-500)
 - 3. Or equal
- C. Homeplate shall be standard baseball size burry-all style Homeplate as manufactured by:
 - 1. Champion Sports Pro Bury All Homeplate (BH-86)
 - 2. JayPro Bury-All Homeplate (HP-100)
 - 3. Or Equal

2.10 VINYL COATED CHAINLINK FENCING

- A. Field Measurements: Verify layout information in field for chain-link fences as noted on the Site Work Exhibit plans. Verify dimensions by field measurements. City of Waltham to confirm exact locations of new fencing.
- B. Chain-link fencing to be black vinyl coated.
- C. Steel Wire for Fabric shall be 9 gauge prior to PVC coating.
- D. Wire shall have polyvinyl chloride (PVC), plastic resin finish, factory applied over galvanizing prior to fabrication of fabric. Thickness of PVC coating shall be not less than 7 nor more than

20 mils thick. PVC coated wire shall be capable of being woven into fabric without the PVC coating cracking. Color shall be black.

- E. Fence framework shall be minimum dimensions and wall thickness according to ASTM F 1043 or ASTM F 1083 based on fence height as indicated on the Site Work Exhibit plans.
- F. Steel parts shall be hot-dipped galvanized inside and out prior to vinyl coating. Use heavy-industrial-strength material Group IA, round steel pipe, Schedule 40.
- G. The metallic coating for steel framework shall be Type A and not less that minimum 2.0-oz./sq. ft. average zinc coating according to ASTM A123/A 123M or 4.0-oz./sq. ft. zinc coating according to ASTM A 653/A 653M.
- H. Galvanized steel parts shall be coated with polyvinyl chloride (PVC) plastic resin finish. PVC coating for framework shall match fabric color.
- I. Provide fittings according to ASTM F 626.
- J. Provide post caps for each post.
- K. For each corner, pull and end post, provide rail and brace ends.
- L. Top rail sleeves shall be pressed-steel or round-steel tubing not less than 6 inches long. Line and corner boulevard clamps shall be used for connecting intermediate and bottom rails to posts.
- M. Truss rod assemblies shall be steel, hot dip galvanized after threading rod and turnbuckle or other means of adjustment.
- N. Tie wires, clips and fasteners shall be according to ASTM F 62d. Standard round wire ties shall be used for attaching chain-link fabric to posts, rails, and frames. Hot-dip galvanized steel [0.106-inch-] [0.148-inch-]- diameter wire shall be used. Galvanized coating thickness to match coating thickness of chain-link fence fabric. Finish shall be metallic coating for pressed steel or cast iron and shall not be less than 1.2 oz./sq. ft. of zinc. Polymer coating to be applied over metallic coating.
- O. Non-shrink, nonmetallic grout shall be factory-packaged, non-staining, noncorrosive, nongaseous grout complying with ASTM C 1107/C 1107M. Provide grout as recommended in writing by manufacturer for exterior applications.
- P. Anchoring cement shall be factory-packaged, non-shrink, non-staining, hydraulic-controlled expansion cement formulation for mixing with water at Project site to create pourable anchoring, patching and grouting compound. Provide formulation that is resistant to erosion from water exposure without needing protection by a sealer or waterproof coating, and that is recommended in writing by manufacturer for exterior applications.

2.11 PRODUCT HANDLING

A. Delivery and storage:

- 1. Deliver all items to the job site in their original containers with all labels intact and legible at time to the City's review.
- 2. Immediately remove from the site all materials, which are not true to name, and all materials that do not comply with the specified requirements.
- 3. Use all means necessary to protect materials from theft, tampering, and weather before, during and after installation, and to protect the work and materials of all other trades.
- 4. All materials must be stored or stockpiled in such a manner so as not to present a threat to the environment. Erosion controls and run off protection must be implemented. All materials must be stored in accordance with relevant protection plans.
- 5. All materials must be inspected prior to acceptance and such inspection shall be documented with, at a minimum, the name of the inspector, the material inspected, the person or company delivering the materials, the results of the inspection, and the date and time of acceptance.
- 6. Contamination: Immediately remove from the site all materials that have been contaminated. In the case of contamination of stockpiled items, confer with the City and if directed remove entire stockpile from site immediately at no cost to the City.
- 7. Repair and Replacement: in the event of damage, immediately make all repairs and replacements necessary to the approval of the City and at no additional cost to the City.

B. Packaged Materials:

1. Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of conformance with state and federal laws, as applicable.

C. Bulk Materials:

- 1. Do not place or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.
- Provide erosion-control measures to prevent erosion or displacement of bulk materials, discharge of soil-bearing water runoff, and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
- 3. Accompany each delivery of bulk fertilizers, lime, and soil amendments with appropriate certificates.
- 4. Fertilizers, lime, and soil amendments must be stored in a secure, locked area, and must be protected from the elements.
- 5. Handle and store so to keep dry and maintain workability of infield materials.

3.0 EXECUTION

SEQUENCE OF WORK TO BE PERFORMED

- Mobilization
- Site Protection
- Stripping of existing vegetation
- Excavation and Stockpile of Existing Rootzone if required
- Remove home plate, and pitcher's rubber
- Sub-Surface Preparation
- Re-establishment of infield clay surfaces
- Grading of existing Rootzone
- Final Laser Grade/Sod Bed Preparation
- Sod Grow in and Establishment
- Turf Maintenance (Grow In and Establishment)
- Site Clean Up
- Final Inspection

3.1 Mobilization

- A. Mobilization will require a 72 HR. notice of intent prior to the delivery of any construction equipment to be left on site. Notify the City.
- B. Prior to the use of any construction equipment, the contractors proposed field layout and elevation control strategies shall be determined and marked.
- C. Materials stockpile areas shall be identified and marked with stakes.
- D. Field protection equipment shall be on site ready for installation.
- E. Prior to use of construction equipment Contractor must locate all underground utilities via "Dig Safe" and the depths of all irrigation lines must be confirmed.

3.2 SITE PROTECTION

A. TEMPORARY CONSTRUCTION FENCING

1. The Contractor is responsible for supplying and installing the temporary construction fencing as indicated on the Site Work Exhibit plans. This fencing shall be placed for the entirety of the project.

B. DISPOSAL OF DEMOLISHED MATERIALS

- 1. Remove from site all materials resulting from site clearing and demolition operations.
- 2. No burning or burying of any waste material will be allowed.
- 3. The Contractor is responsible for off-site disposal costs and haulage fees of organic material and, if required, any related permits or licenses. Composting the organic material is preferable.

C. EROSION AND SEDIMENTATION CONTROLS

- The Contractor shall construct all erosion and sedimentation control features at the
 earliest practical time as outlined in the accepted schedule. Temporary erosion and
 sedimentation control measures shall be used to correct conditions that develop during
 construction which were unforeseen but are needed prior to installation of permanent
 erosion and sedimentation control features, or that are needed temporarily to control
 erosion or sedimentation which develops during construction operations.
- Contractor shall be responsible for controlling erosion within the project area and retaining sediment on-site away from sensitive environmental resources. Any fines, construction delays, remedial actions, or incarceration resulting from the Contractor's failure to comply with these provisions shall be the responsibility of the Contractor and not the City.
- 3. Failure by the Contractor to control erosion, pollution, and siltation shall be cause for the City to employ outside assistance to provide the necessary corrective measures. The cost of such assistance, including Athletic Field Consulting costs, will be charged to the Contractor and appropriate deductions made from the Contractor's monthly progress payment.
- 4. The Contractor shall remove and properly dispose of sediment from control facilities as required by the City. The Contractor shall modify and improve erosion and sedimentation control facilities and replace deteriorated straw bales and other degraded erosion control devices.
- 5. Minimum temporary and permanent erosion and sedimentation control measures are shown on the Site Work Exhibit plans. The Contractor shall strictly adhere to the minimum provisions shown. Additionally, temporary measures shall be selected and constructed by the Contractor in consultation with the Athletic Field Consultant to accommodate changing field conditions that develop during construction.
- 6. The temporary sedimentation basins shall be maintained from the start of construction until construction of the permanent detention basins and/or storm water system is completed, and perimeter areas are stabilized. A temporary outlet shall be constructed above the expected sediment levels. Construction of the basins shall be sequenced so that the temporary outlet is installed, and basin embankment is constructed with the material available from the initial site excavations.
- 7. All disturbed areas shall be re-vegetated by loaming and seeding unless otherwise noted on the Site Work Exhibit plans.
- 8. When in the opinion of the City it becomes necessary, the City will inform the Contractor of construction procedures and operations that jeopardize erosion and sedimentation control provisions. If these construction procedures and operations are not corrected promptly, the City may suspend the performance of any or all construction until corrections have been made, and such suspension shall not be the basis of any claim by the Contractor for additional compensation from the City nor for an extension of time to complete the Work.

D. SILT FENCE

- 1. Silt fence shall be installed at locations as shown on the Site Work Exhibit Plans as the Limit of Work.
- 2. Supporting posts shall be spaced 4 feet on center and driven at least 1 foot into the ground. Posts shall be 1-1/2 inch square or heavier wood posts or standard steel posts.

- 3. Fabric shall be anchored in a 4-inch deep trench dug on the upslope side of the posts. The trench shall be at least 4 inches wide. The fabric shall be laid in the trench, backfilled, and compacted.
- 4. Fabric rolls shall be spliced at posts. The fabric shall be overlapped 6 inches, folded over, and then securely fastened to posts.
- 5. Silt fences shall be inspected immediately after each storm event and at least daily during prolonged rainfall.

E. MAINTENANCE OF EROSION AND SEDIMENTATION CONTROL MEASURES

- The Contractor shall check the condition of erosion and sedimentation control devices daily and maintain them in good operating condition. Straw bales shall be replaced when deteriorated.
- The Contractor shall inspect the condition of diversion dikes and ditches, filter berms, interceptor dikes, sediment basins, and other erosion and sedimentation control devices after each rainstorm and during major storm events. Repairs shall be made as necessary.
- 3. Special care must be taken with Infield clay materials as these are easily trans located with wind or water. All reasonable efforts must be made to place or remove these materials as soon as possible. If stored on site, Contactor shall remain vigilant in inspecting the adequacy of erosion control measures.
- 4. Temporary soil erosion and sedimentation control devices shall be removed and adjacent areas outside the limits of grading restored upon completion of the work or when required by the City.

F. DUST CONTROL

- 1. To prevent surface and air movement of dust from disturbed soil surfaces that may cause off site damage, health hazards, traffic safety problems, and neighbor complaints.
- 2. Construction operations should be scheduled to minimize the amount of area disturbed at any one time.
- Special consideration must be paid to current and upcoming weather conditions, including weather conditions when work is not being conducted (i.e. Weekends). If the weather is conducive to excessive dust generations (i.e. wind speeds greater than 15 mph, relative humidity below 30%)
- 4. Driving Areas must have a gravel runoff strip to prevent soil from accumulating upon pavement. If pavement becomes contaminated and generates dust it must be swept clean. Vehicles shall not leave the site with accumulations of loose soil on the exterior. Six (6) inches of free board must remain in any soil conveyance and all vehicles must have appropriate soil covers in place when underway to and from the site.
- 5. During work the contractor must perform dust control before:
 - Dust becomes visible in the air and before complaints occur
 - Dust is excessively collecting on nearby surfaces, (i.e. cars, buildings etc.)
 - Dust is excessively collecting on nearby surfaces, (i.e. cars, buildings etc.)
 - Dust causes visibility issues for drivers, workers, or pedestrians
 - A significant period of work stoppage time (i.e. weekends)
- 6. Dust control strategies may include:

- Dampening the surface where practical.
- Covering stockpiles with plastic sheeting when not in use
- Covering the site with geotextile and staking every 10 feet
- Soil Stabilizers
- 7. While water is preferred, if necessary, a soil stabilizer such as Soil2O from Geltech or equal may be used. The product must be compatible with turf grass. Magnesium Chloride or Calcium Chloride shall NOT be used nor shall mulch applications be acceptable.

3.3 STRIPPING OF EXISTING VEGETATION

- A. Remove existing turf to a depth of +/- two inches (+/-2") utilizing recommended LGP equipment or equivalent at one (1) inch plus/minus one-eight (1/8) inch pass increments until the specified depth is achieved.
- B. Transport pulverized turf and organic material to designated stockpile holding area for removal from site, utilizing approved LGP equipment.
- C. The Contractor is to provide equipment to load and haul all debris material away from designated stockpile area. Proper stockpiling procedures must be used.
- D. The Contractor is responsible for off-site disposal costs and haulage fees. Composting the organic material is preferable to landscaping.

3.4 EXCAVATION AND STOCKPILING OF EXISTING ROOTZONE AND CLAY AREAS

- A. The contractor shall provide all labor, materials and equipment (including LGP equipment) required to provide earthmoving and subgrade elevations as indicated on the Site Work Exhibit plans.
- B. Utilize appropriate LGP equipment for excavation of existing infield clay material (as required)
- C. Remove any existing stone and other debris from subgrade to a depth of 3 in. utilizing appropriate LGP equipment.
- D. Utilize appropriate LGP equipment, grade sub base to +/- one quarter of an inch (0.25") of finish sub base elevation to subgrade to mirror final surface grades.

3.5 RECONSTRUCTION OF INFIELD CLAY AREAS

- A. Place mixes in lifts of 2 inches and compact with necessary equipment until an optimum compaction is achieved. Scarify the surface to facilitate bonding of the next lift and repeat until finish grade elevation is achieved.
- B. Compaction:
 - 1. Pitching Mound Compaction: 90 to 95 percent.
 - 2. Skinned Infield Compaction: 85 to 90 percent.

- C. The Infield clay shall have a compacted depth of 4".
- D. Watering. If unable to achieve optimum compaction, a light application of water may be used. Use caution to not overwater.
- E. Apply calcium chloride evenly at the rate of 3/4 pounds per square yard as recommended by mix manufacturer. Mix into top 2 inches by raking or dragging.
- F. Rake to smooth grade; then compact with small roller leveling edges of existing grades. Remove all rocks and debris over ½ inch in size (in any dimension).
- G. Remove from the field of play all infield material contaminated by installation. Remove all infield materials from adjacent lawns or sod. Trim all edges with lawn straight and true.
- H. Finish Grading: Infield Mix shall be laser graded to a tolerance of 1/8 inch. Slope infield towards outfield at 0.5 1 percent slope.
- I. Topdressing: Following final approval of infield surfacing, topdressing shall be applied to the surface. Topdressing material shall be either expanded shale or calcined clay as recommended by manufacturer and applied at a rate of 1 pound per square foot. Materials meeting this specification are the following:
 - 1. ProSlide Engineered Topdressing (expanded shale), as manufactured by DuraEdge Products, Inc., Grove City, PA, (866) 867-0052
 - 2. Turface Pro League Heritage Red Conditioner (calcined clay), as manufactured by DuraEdge Products, Inc., Grove City, PA, (866) 867-0052
 - 3. or an approved equal.
- J. The finished surface of the infield shall be smooth and free from any visible undulations or other blemishes, which would hinder the removal of water through positive surface drainage. Where warranted, a finished elevation survey shall be conducted to assure proper installation.
- K. The Pitching mound shall be constructed of the specified pitching mound clay. It is not acceptable to use infield skin clay for the pitching mound.

3.6 REPLACEMENT OF EXISTING ROOTZONE (WHERE REQUIRED)

- A. A volume of the existing rootzone material necessary to reestablish the existing natural turf grades must be transported from the stockpiling area onto the existing subbase using appropriate LGP equipment as necessary. The material shall be placed around the subbase to allow effective distribution and placement by LGP equipment as necessary.
- B. Haul, backfill, laser grade and compact a uniform layer of rootzone over the established subbase layer to meet the required slopes and elevations of finish grade. Utilize hauling, backfilling, grading, finish grading and compaction equipment as appropriate.

- C. The replaced existing rootzone layer must be laser graded and consolidated to meet the required slopes and elevations of finish grade elevations utilizing power raking, and ground preparation equipment as appropriate.
- D. The site shall be inspected for acceptance of rootzone replacement and grading by the City, for approval prior to final laser grade and seed bed preparation

3.7 Irrigation System Testing and Final Assembly

- A. At the completion of finish rootzone grading and compaction, the irrigation system will be activated to locate sprinkler head swing joint assemblies. Head location areas can then be excavated by hand to expose the swing joint for cap removal and head installation.
- B. All sprinkler heads shall be installed, set to appropriate grades, backfilled and tamped. The entire system will then be tested zone by zone to ensure proper function, coverage, adjustment and soil saturation limits.
- C. The entire system shall be used for hydraulic saturation and settling of the root zone profile prior to the final preparations for sodding.

3.8 FINAL LASER GRADE AND SOD BED PREPARATION

- A. The entire disturbed area site to be sodded shall be laser graded and consolidated to predetermined finish grade elevations Utilizing appropriate power raking and ground preparation equipment as needed.
- B. All edges, corners, and material transition areas shall be graded and consolidated by manual labor if necessary, to insure consistent elevation control with surface stabilization and firmness throughout the site. The site shall be inspected for acceptable finish grade and compaction by the City
- C. At the completion of finish grading and compaction, the irrigation system will be tested, and sprinkler heads installed.
- D. The sod surface shall be prepared utilizing appropriate sod bed preparation equipment as needed.
- E. The site shall be inspected for acceptance of final sod bed preparation by the City, for approval, prior to sodding operation.

3.9 SODDING, GROW IN AND ESTABLISHMENT

A. LIMING

- 1. The liming, fertilizing and sodding shall be done during a period of time to be approved by the City. In general sodding will be allowed after September 1 or before May 15. The Contractor shall notify the City thirty (30) days prior to the time that he intends to begin this work.
- 2. After all surfaces to be sodded have been prepared to the sod sub-grade, the Contractor shall furnish and apply limestone as herein specified.

- 3. Limestone shall be applied at the rate determined by the results of laboratory tests conducted at a certified testing laboratory at the Contractor's expense.
- 4. Lime shall be mechanically spread at the rate determined by testing on all areas which are to be sodded up to a slope gradient of twenty-five percent (25%).
- 5. The lime shall be distributed uniformly and worked into the top four (4) inches minimum of the topsoil areas designated for sodding by discing or rototilling and shall be uniformly blended into the topsoil.

B. SODDING

- 1. After the preparation of the areas to be sodded has been reviewed by the Engineer, the Contractor shall sod the areas as specified herein.
- 2. In accordance with the rectangular sod strips measuring twelve (12) inches or sixteen (16) inches in width and from four (4) feet to six (6) feet in length the following provisions shall apply:
 - All sod shall be placed with close joints and no overlapping by whatever method
 is chosen. Sod shall be laid in strips, edge to edge, with the lateral joints
 staggered. All minor or unavoidable openings in the sod shall be closed with sod
 plugs.
 - The prepared topsoil shall be so prepared to permit use of the tractor and laying device without causing depressions, ruts, etc., in the smooth finished surface to be sodded. Any depressions caused by the Contractor shall be remedied at no extra cost to the City.
 - The topsoil shall not be moist at the time of installation; however, it shall contain enough moisture so as not to be powdery or dusty, both as determined by the supplier's representative.
 - The sod shall be uniformly distributed over the prepared topsoil bed and pulled tightly against the edges of previously laid sections by laborers with garden rakes to ensure tight joints and to prevent drying of the sod at the joints.
 - The sod must be watered on the same working day on which it is installed. If necessary, the Contractor shall provide special crews after normal working hours to accomplish such watering at no extra cost to the City. After this initial watering, the Contractor shall be required to furnish, install and maintain a system of temporary pipe, sprinklers and service connections which are adequate to water the sod weekly with the equivalent of one (1) inch rainfall. During the first week of the sod installation, watering shall be accomplished daily with a sufficient quantity of water to penetrate through the sod and into the sub-base. If the sod is watered by normal rainfall or if weather conditions dictate, the Contractor may, at his discretion, eliminate or increase watering during a given week. However, such action by the Contractor shall in no way waive the Contractor's responsibility for the growth and health of the grass until final acceptance of the sodding.
 - If, in the opinion of the City, rolling of the sod is required to properly joint the sod to the bed after the sod is laid and twenty-four (24) to forty-eight (48) hours after initial watering, the Contractor shall roll the required area with a roller which weighs from seventy-five (75) to one hundred (100) pounds per square foot of roller width at no extra cost to the City.

- The completed sodded surface shall be true to finish grades shown and even and firm at all points.
- C. Spring 2020 Applications: All dates and timing to be approved by the City, based on environmental and surface conditions. Products and rates may be adjusted with the approval of the City based on soil tests and specific growth requirements. Apply fertilizer to dry turf and water in post application.

3.10 CHAIN-LINK FENCE INSTALLATION

- A. Install chain-link fencing according to ASTM F 567 and more stringent requirements specified.
- B. Drill or hand-excavate holes for posts to diameters and spacings as needed, in firm, undisturbed soil. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices. Place concrete around posts to dimensions indicated and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter.
- C. Install post bracing and intermediate rails according to ASTM F 567, maintaining plumb position and alignment of fence posts. Diagonally brace terminal posts to adjacent line posts with truss rods and turnbuckles. Install braces at end and at both sides of corner and pull posts.
- D. Locate horizontal braces at mid-height of fabric 72 inches or higher. Install so posts are plumb when diagonal rod is under proper tension.
- E. Install top rail according to ASTM F 567, maintaining plumb position and alignment of fence posts. Run rail continuously through line post caps, bending to radius for curved runs and terminating into rail end attached to posts or post caps fabricated to receive rail at terminal posts. Provide expansion couplings as recommended in writing by fencing manufacturer.
- F. Intermediate and bottom rails shall be secure to posts with fittings.
- G. Tension or stretcher bars shall be thread through fabric and secure to end, corner, and pull posts, with tension bands spaced not more than 15 inches o.c.
- H. Use wire of proper length to firmly secure fabric to line posts and rails. Attach wire at one end to chain-link fabric, wrap wire around post a minimum 180 degrees, and attach other end to chain-link fabric according to ASTM F 626. Bend ends of wire to minimize hazard to individuals and clothing. Tie fabric to line posts at a maximum spacing of 12 inches o.c. and to braces at 24 inches o.c.

3.11 TURF MAINTENANCE

A. Maintain and establish turf for a minimum of 150 days from completion of substantial completion by utilizing proper irrigation, fertilizing, weeding, mowing, trimming, replanting, and performing other operations as required to establish healthy, viable turf. Roll, re-grade, and replant bare or eroded areas to produce a uniformly smooth turf. Provide materials and installation the same as those used in the original installation.

- B. Fill in as necessary soil subsidence; with a Rootzone Material that is consistent with the existing materials, that may occur because of settling or other processes. Replace materials and turf damaged or lost in areas of subsidence.
- C. Apply treatments as required to keep turf and soil free of pests, including surface and subsurface insects, weeds, and all turf and soil disease pathogens. Use integrated pest management practices whenever possible to minimize the use of pesticides and reduce hazards.

D. Irrigation:

- 1. Schedule watering to prevent wilting, puddling, erosion, and displacement of seed.
- 2. Water turf with fine spray at a minimum rate of 1/8 inch at 2 am, 8 am, 2 pm, and 8 pm, or as directed by the City, unless rainfall precipitation is adequate.

E. SATISFACTORY TURF

- 1. Satisfactory Sodded Turf: At the end of the maintenance period, a healthy, uniform, close stand of grass, free of weeds and surface irregularities, with coverage exceeding 95 percent over any 10 sq. ft. (0.92 sq. m). a maximum of 5% of bare areas over entire athletic field surface is tolerated.
- 2. Use specified materials to reestablish turf that does not comply with requirements and continue maintenance until turf is satisfactory.

F. RESTORATION OF SETTLED GRADES

- 1. Five months after the date of substantial completion of the sod and infield skin, Contractor shall inspect the site and restore any areas where the grades have settled beyond the grades shown on the Site Work Exhibit plans.
- 2. Athletic Field areas: Remove the turf using mechanical sod cutter from the settled area and add rootzone material. Re sod the area using the sod cut from the athletic field. In the event that the sod cannot be reused, install new sod that matches the installed sod.

G. MAINTENANCE SERVICE

- 1. Turf Maintenance Service: Provide full maintenance by skilled employees of landscape Installer. Begin maintenance immediately after each area is sodded and continue until acceptable turf is established but for not less than the following periods:
 - Sodded Turf: 150 days from date of Substantial Completion.
 - When maintenance period has not elapsed before end of planting season, or if turf is not fully established, continue maintenance during next planting season.

3.12 SITE CLEAN UP

A. At the completion of all construction work the contractor shall clean and remove all debris, excess soils and construction related items from the project site. The contractor is responsible for all restoration of the grounds back to their original condition previous to the start of the project. The contractor shall follow his predetermined site restoration plan and supplement

- with additional damage repair procedures if required. In the event of the need for re-sodding and turf re-establishment, the contractor shall be obligated to fulfill the guidelines on sod bed prep and sodding set forth in this Specification prior to final inspection and acceptance.
- B. Erect temporary fencing or barricades and warning signs as required to protect newly sodded areas from traffic. Maintain fencing and barricades throughout maintenance period and remove after plantings are established.
- C. Remove all erosion-control measures after grass establishment period.

3.13 FINAL INSPECTION

- A. Contractor and City shall meet to complete a final inspection of all work at completion of the project. City will list all items requiring correction or completion (punch list) and furnish a copy to the contractor.
- B. Contractor shall repair and replace defective work in a timely manner (generally within 5-days). Contractor shall notify the City upon completion of corrective actions for re-inspection of work. Undiscovered deficiency issues by the City or their agent(s) does not exempt the contractor from liability and responsibility for correction action(s) as specified by the 1-year warranty document.
- C. All work shall be completed in accordance with specifications as written herein and warranty requirements.

END OF SECTION 321823

