TO: All Bidders  
FROM: City of Cambridge  
DATE: February 8, 2022  
RE: File No. 10130 – Fresh Pond Golf Course Fence Replacement - Addendum No. 3

This addendum is comprised of the following:
1. Revised material specifications (attached)

All other details remain the same.

Elizabeth Unger  
Purchasing Agent  
Addendum No. 3
PART 2 - MATERIALS

2.01 VINYL CLAD STEEL POSTS, RAILS AND BRACES

A. General

1. All fence pipe for posts, rails, and all braces and appurtenances shall be vinyl clad, 40 weight, round, seamless hot dip galvanized pipe conforming to ASTM-A-120-1 or approved equal.

2. All structural shapes shall be vinyl clad and galvanized in conformance with ASTM Designation A123.

3. All vinyl clad materials shall be fusion bonded in accordance with ASTMF668 Class 2B.

B. End, Corner and Pull Posts

I. Terminal post size 2.875"O.D. pipe.

2. Maximum Spacing 10’-0” on Center.

C. Line Posts (10’-0” Maximum Spacing)

I. Fence must be minimum 6’-0” in height.

2. Line post size 2.375” O.D. pipe.

D. Gate Posts

I. Double gate. Gate post shall be 4.00” O.D. pipe.

E. Rails

1. Top and bottom rails shall be 1.625” O.D. pipe. Furnished in manufacturer’s standard lengths of approximately 21’-0” with outside sleeve type couplings, at least six (6) inches long for each joint – one (1) coupling in each five (5) to have expansion spring. Provide means for attaching rails securely to each corner, pull and end post. Rails shall form continuous brace from end to end of each run of fence.

F. Post Bracing Assembly

1. 1.625” O.D. pipe. Provide at each side of corner and pull posts and at end posts for fence six (6) feet or higher.
2.02  CHAIN LINK FABRIC (VINYL CLAD)

A.  Chain Link fence fabric shall be factory coated 9-gauge core fused and bonded type 2B with 8-gauge finish. All cut ends shall be coated with vinyl at the factory. Fabric shall be 2" mesh at all locations and black in color throughout.

C.  Top and bottom of fabric shall have knuckled selvage, both sides.

2.03  FITTINGS AND ACCESSORIES (VINYL CLAD)

A.  All accessories shall be vinyl clad in accordance with paragraph 2.01 above and galvanized in conformance with ASTM Designation A153.

B.  Post Caps

Furnish and install tight fitting pressed steel or malleable iron caps, designed as a weather tight closure cap. Provide one (1) pass-through looped cap for each line post, and one (1) acorn style cape for each end or corner post. Where top rail is used, provide looped cap tops to permit passage of top rail.

C.  Tension Bars

1.  One (1) piece lengths equal to full height of fabric with minimum cross section of 3/16" x 3/4", conforming to ASTM Designation A123. Provide one (1) stretcher bar for each end post and two (2) for each corner and pull post.

2.  Tension bands and brace bands, if utilized, shall be 7/8" x 12 gauge beveled, galvanized, sized to fit pipe sizes and furnished with galvanized fasteners. Galvanizing shall conform with ASTM A123 or A153 as they pertain.

D.  Rail Clamps

1.  Rail clamps shall be standard clamps (boulevard clamps) furnished complete with fasteners with ASTM Designation A153.

E.  Fabric Bands for Tying Fabric

1.  Fabric shall be attached using 6-gauge aluminum

F.  Fittings, lugs, clamps and other accessories shall be steel conforming to ASTM Designation F626 and galvanized in conformance with ASTM Designation A153.

2.04  GATE

A.  Only products from qualified manufacturers having a minimum of 5 years of experience manufacturing chain link fence gates will be accepted by the Owner’s Representative. Products shall meet the following specifications for design, size, gauge of metal parts and fabrication.
B. Obtain chain link fence and gates, including accessories, fittings, and fastenings, from a single source.

C. **Gate height shall match the height of the fence.**

D. **Gate is a double gate, width shall be 12 feet total, consisting of two 6 foot sections. Gate sections need to have a latching mechanism for a lock.**

E. Gate frames shall be galvanized in accordance with ASTM F669, F1083 or F1234, or a combination thereof, and shall match that selected for the adjoining fence work.

F. Gate frame shall provide minimum 2 inch (38 mm) tubular additional horizontal and vertical interior members to ensure proper strength.

G. Chain link fence fabric shall match the fabric of the fences.

H. Hardware materials: Hot dipped galvanized steel or malleable iron shapes to suit gate size. Field coat moveable parts (e.g. hinges, latch, keeper, and drop bar) with PVC touch up paint, provided by manufacturer, to match adjacent finishes.

I. Hinges: Structurally capable of supporting gate leaf and allow opening and closing without binding. The hinges shall not twist or turn under the action of the gate. The gate shall be capable of being opened and closed easily by one person. Provide 3 hinges for each gate leaf.

K. Keeper: Provide keeper for each gate. Gate keeper shall consist of mechanical device for securing free end of gate when in full open position.

2.05 WELDING OF GATE

A. Workmanship and finish shall be equal to the best practice of modern shops for each item of work. Exposed surfaces shall have a smooth finish and sharp, well defined lines and arrises. Sections shall be well formed to shape and size with sharp lines and angles; curved work shall be sprung evenly to curves. Welding shall be in accordance with the Structural Welding Code of the American Welding Society. All welding, except as otherwise indicated, shall extend the entire length of joints. All welded face joints shall be ground flush and smooth. Welding shall conform to the requirements of ASTM F900 except as modified in this Section, CHAIN LINK FENCE.

B. Welding shall be continuous. All exposed welds shall be ground smooth. Pipe joints shall be mitered or cut as "fish-mouth" pipe joints, will all connections full seam welded then ground smooth, wire brushed. All welds shall be touch-up painted with three coats of zinc rich paint, equal to "Tneme Zinc 90-93", by Tnemec Paint Co., Woburn, Massachusetts; "ZRC" cold galvanizing compound by Sealube Co., Quincy, Massachusetts; or "Zirp" by Duncan Industries, Everett Massachusetts, or approved equal, prior to application of vinyl coating.

C. Where structural joints are made by welding, the details of all joints, the techniques of welding employed, the appearance and quality of welds made, and the methods used to correct defective work shall conform to requirements of the AWS code.
D. Welds shall be made only by welders who have previously been qualified by tests as prescribed in AWS "Standard Qualification Procedure" for the type of work required.

E. The use of gas cutting torch in the field for correcting fabrication errors will be permitted only when the prior written approval of the Owner’s Representative has been obtained for each specific condition.

F. Weld with uncoated wire to prevent flux deposits. If coated wire is used, all flux residue shall be thoroughly removed and bare white metal exposed. Where overlapping surfaces are welded, seal off contact area by welding all edges around contact area.

2.06 ANCHORING CEMENT

A. Cement for anchoring posts in sleeves embedded in concrete walls shall be "POR-ROK", as manufactured by Hallemite (Lehn and Fink Industrial Products, Division of Sterling Drugs, Inc.), Montage, New Jersey, or approved equal.

B. "Sika Cola-Due" by the Sika Co.

C. "Five Star Grout" the Five Star Co.

2.07 CEMENT CONCRETE

A. Cement concrete for post footings shall conform to MassDOT standards.