

CITY OF NEWTON

IN BOARD OF ALDERMEN

SPECIAL MEETING

JOINT PUBLIC FACILITIES AND  
FINANCE COMMITTEE REPORT

WEDNESDAY, OCTOBER 17, 2007

Present from Public Facilities Committee: Ald. Salvucci (Acting Chairman), Weisbuch, Albright, Yates Mansfield; and Lappin; absent: Ald. Gentile and Schnipper  
Present from Finance Committee: Ald. Coletti (Chairman), Lennon, Salvucci, and Parker; absent: Ald. Gentile, Linsky, Lipof and Schnipper  
Also present: Ald. Baker, Burg, Hess-Mahan and Sangiolo  
City staff present: Mayor Cohen, Elaine Gentile (Director of Environmental Affairs, Public Works Department), David Turocy (Acting Commissioner of Public Works), Nunzio Piselli (Public Works Department), Lou Taverna (City Engineer), Eileen McGettigan (Assistant City Solicitor), Dori Zaleznik (Chair of the School Committee), Reenie Murphy (School Committee Member) and Shawna Sullivan (Committee Clerk)

**REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES**

#291-07(2) **HIS HONOR THE MAYOR** requesting authorization to enter into a multi-year contract for disposal of municipal solid waste. [09-25-07 @ 3:57 PM]

**ACTION:** **PUBLIC FACILITIES APPROVED 5-0-1 (Weisbuch abstaining)**  
**FINANCE APPROVED 4-0**

**NOTE:** The Public Facilities and Finance Committees met jointly to discuss this item. The Committees previously discussed this item on October 10, 2007. At that time, the Committees decided that the twenty-year contract for the disposal of the trash was beneficial to the City. However, the Committees were not willing to act on the item until the Executive Office could provide the contract for review. The waste disposal agreement was provided to the Board for review in the packet this past Friday. The contract must be signed by December 31, 2007 or negotiations will need to resume. Ald. Coletti made it clear that if the authorization is approved, there should not be any further changes to the contract without Board review.

Elaine Gentile gave a brief explanation of the choice of incineration as the most practical form of disposal both economically and environmentally. Ald. Albright asked how much energy was generated by the incineration process. Mr. Fred Compaloni of Waste Management stated that it provides approximately 45 megawatts of power an hour of which 5 watts is used in-house and the other 40 watts provides power to 40,000 homes.

Members of both Committees agreed that it is appropriate for the City to enter into the contract. Ald. Yates asked that the contract be amended to allow a representative of the Mayor as well as the Mayor to enter into negotiations regarding the contract. Eileen McGettigan stated that the change is not a problem. With that, there was a motion of approval including the

amendment by Ald. Yates in Public Facilities, which carried unanimously. Ald. Parker moved approval in Finance, which carried unanimously.

**REFERRED TO PUBLIC FACILITIES AND FINANCE COMMITTEES**

#306-07 HIS HONOR THE MAYOR requesting an appropriation in the amount of \$100,000 from General Fund Revenue to the Stormwater Fund for the purpose of conducting an engineering study of the drainage in the area of the fields at Newton South High School. [10-09-07 @6:03 PM]

**ACTION:** **PUBLIC FACILITIES APPROVED 6-0**  
**FINANCE APPROVED 4-0**

**NOTE:** The Public Facilities and Finance Committees met jointly to discuss this item and Lou Taverna presented the item to the Committees. The item is a request for funding to conduct an engineering study of the drainage in the area of the fields at Newton South High School. There have been some changes to the draft Request for Proposals (RFP) that was provided to the Board of Aldermen. The draft REP, which includes the amendment, is attached. Ald. Coletti requested several changes to enhance the RFP and the City Engineer has no problems with those changes. Both Committees thoroughly reviewed the RFP. There were no issues in either Committee with the RFP and both Committees voted unanimously to recommend approval of the item.

Respectfully submitted,

Paul E. Coletti, Chairman

**City of Newton  
South Area Drainage Review & Feasibility Analysis  
for  
Athletic Field and Track Alternatives  
at  
Newton South High School  
Request for Proposal**



2007 OCT 17 PM 3:11  
CITY CLERK  
NEWTON, MA 02159

**Prepared by:**

**City of Newton  
Department of Public Works  
Engineering Division**

**October 2007**

**City of Newton**  
**South Area Drainage Review & Feasibility Analysis**  
**for**  
**Athletic Field and Track Alternatives**  
**at**  
**Newton South High School**  
**Request for Proposal**

Introduction

The City of Newton through its Engineering Division is requesting proposals from qualified Consultants to provide professional engineering services. The consultant must have extensive experience in designing athletic fields, including synthetic turf fields. The consultant must have civil engineering design experience, particularly in the evaluation and design of drainage systems. The consultant must also have geotechnical engineering experience, or engage a sub-consultant with such experience.

The selected Consultant shall conduct a drainage review of a section of south Newton, as it relates to the proposed project and its impact on abutting residential properties, and provide conceptual design alternatives for the proposed synthetic turf and/or grass fields at the Newton South High School Complex.

The current athletic fields at Newton South High School are natural grassed surfaces built on fill material, over original wet areas. Over time the fill material has compacted which has decreased the infiltration capacity of the soils and has created several depressed areas. During rainfall events these depressed areas hold water, making portions of the fields unusable. The City desires to evaluate the feasibility of constructing new athletic fields using **a combination of grass and/or synthetic turf.**

South Area Drainage Review

The study will evaluate existing drainage problems as they relate to the proposed project within the watershed area and identify probable causes. The study will identify problem areas within the collection/transport system that may contribute to significant flooding events as well as the more common "nuisance" flooding events. The study must also evaluate drainage system alternatives and recommend a conceptual drainage design to be constructed as a major component of field renovations. The study will determine renovation proposed for the Newton South High School athletic fields will improve or compound any current flooding issues, including on abutting properties. **The study will include investigating the feasibility of underground collection and storage of stormwater for recycling and irrigation uses.**

Conceptual Design Alternatives

The consultant shall provide conceptual design alternatives for the athletic fields and the track, as defined below. The design alternatives shall include site design and drainage design, and preliminary costs. The consultant shall provide the relative merits and environmental considerations related to synthetic turf and grass alternatives.

### Scope of Services

- 1) Conduct a South Area Drainage Review of a section of south Newton that will review the history, background information and current problems of the area as they relate to the proposed project. The watershed area is approximately 1,950 acres in size and is identified as Major Flow Field 11 on the City of Newton map entitled "Drainage Channelization" with a compiled date of March 1982. The study area includes South Meadow Brook that is tributary to the Charles River. South Meadow Brook stretches from the Brookline town line to the Charles River (flowing east to west). The brook has both open and culvert flow. Specific tasks will include, but not be limited to:
  - a) Preliminary Research – The Consultant shall review flooding complaints received by the City to compile a preliminary list of problem areas that may impact or be impacted by the proposed project. Conduct interviews with appropriate City Officials and employees to determine areas of concern that are not publicly known.
  - b) Review Drainage Mapping – The Consultant shall review all existing maps and plans available.
  - c) Conduct comprehensive soil and groundwater testing of the entire Newton South site, including the football field/track area. Conduct on-site investigations to determine soil type as well as the seasonal high groundwater table. The extent of the field investigation must be sufficient to accurately determine the depth and extent of the fill material. Additional testing of the native soils will also be required to determine the drainage characteristics. On site investigation may include soil borings, test pits and percolation tests.
  - d) Provide a drainage and geotechnical report describing the existing conditions and feasibility of constructing a drainage system to serve turf and/or grass fields.
  - e) Compile a comprehensive list of problem areas that may impact or be impacted by the proposed project.
  - f) Determine if the addition of the synthetic turf at Newton South High School will impact (positively or negatively) current flooding issues.
  - g) Determine the off-site impact of the proposed project including on abutting properties and down stream drainage areas.
  - h) Prepare a hydraulic analysis of the closed sections of South Meadow Brook to identify any possible areas of constraint within the system related to the proposed project.
  - i) Develop recommendations for improvements including a set of structural and/or non-structural recommendations for the potential improvement of drainage problems related to the proposed Newton South project and abutting residential properties, such as cleaning of ditches and culverts, redirection of surface flow, resizing of culverts, and other potential solutions applicable to various site specific drainage problems. **As part of the study of various drainage alternatives, study the feasibility of the installation of a drainage retention cistern under football field for collection and usage of stormwater for irrigation.**
  - j) **The consultant shall investigate and determine the feasibility of methods used to control water collection and to control removal of stormwater runoff in the wetland area adjacent to the fields and the parking lot, in a manner acceptable to the Department of Environmental Protection and the Newton Conservation Commission. This shall include investigating the feasibility of an acceptable drawdown system to handle the removal of excessive stormwater accumulation.**



- k) Evaluate current methods of stormwater removal during major storm events in the Newton South High School complex, and recommend methods for potential improvement.
  - l) Study existing storm drain sizes and design of back up drainage at Brandeis Road.
  - m) Submit to the City Engineer a summary report indicating findings.
- 2) Provide Conceptual Design Alternatives for the athletic fields at Newton South High School. (Note that it is essential to evaluate drainage feasibility and cost for each alternative):
- a) Conceptual design alternatives (fields)
    - a. Restoration of fields with all grass surface
    - b. Restoration of fields with 3 synthetic turf fields (see attached conceptual design)
    - c. Restoration of fields with 3 synthetic turf fields (existing football field, competition field and softball field), with baseball field restored as grass field with drainage
    - d. Restoration of fields with 2 synthetic turf fields (competition and baseball only, see attached)
    - e. Restoration of fields with 2 synthetic turf fields (existing football field expanded and baseball, see attached)
  - b) Conceptual design alternatives (track)
    - a. Restoration of existing track including subsurface plus areas for field events
    - b. Construction of new track in association with constructing a synthetic turf field on the existing football field
  - c) All alternatives should be evaluated for drainage, soil conditions and cost
  - d) Provide the relative merits and environmental considerations related to synthetic turf and grass alternatives
  - e) Submit to the City Engineer a summary report indicating findings.

#### Schedule

Time is of the essence. The consultant shall schedule his work to complete the study and alternative designs within 3 months of notice to proceed. Please note in your submission if a faster schedule can be achieved. The City desires to complete final design and to commence construction in autumn 2008. Consistent with the forgoing, hydrologic studies should be conducted during maximum high groundwater periods, and/or such other times as a Hydrologist deems appropriate.

#### Evaluation Criteria

Selection of a Consultant will be the responsibility of a committee consisting of City designated representatives. The evaluation will be based upon the written submittals, including cost proposal. The factors that will be evaluated include, but are not limited to:

- a. Proposed fee schedule and fee schedule methodology.
- b. Relevant experience conducting Comprehensive Drainage Studies.
- c. Relevant experience with the design of drainage systems and underground collection systems for recycling stormwater for athletic field and wetland applications.

- d. The Consultant's experience designing athletic fields including both grass and synthetic turf.
- e. The Consultant's understanding of and the technical approach to the project.
- f. The Consultant's knowledge of requirements involving hydraulic analysis.
- g. The Consultant's ability to perform the work in a timely manner.
- h. Review of references listed.

**Submittal Requirements & Dates**

Consultants shall submit six copies of their technical proposal and cost proposal by close of business (5:00 pm) on November 16, 2007. The technical proposal and the cost proposal shall be delivered in separate sealed envelopes to:

City of Newton DPW

1000 Commonwealth Avenue

Newton, MA 02459

Attn: City Engineer, Response to Request for Proposal