



**CITY OF EAST PROVIDENCE
DEPARTMENT OF PUBLIC WORKS
REQUEST FOR PROPOSALS
RFP EP23/24-25**

**IRRIGATION IMPROVEMENTS AT HULL STREET FIELD
BID OPENING THURSDAY, APRIL 25, 2024 AT 11:00AM**

SPECIFICATIONS

Scope of Work:

- A. The Contractor shall provide all labor, materials, equipment and incidentals required to construct and finalize the irrigation.
- B. The Contractor or sub-contractor must submit irrigation system design plans to the City for approval prior to award. System shall meet minimum flow requirements for specified Hunter products and meet full field coverage as indicated on the plans.
- C. The Contractor must have at least Ten (10) years of experience in work of this type and size and which is acceptable to the City.
- D. The Contractor must supply five (5) references for work of this type (Athletic Fields) with their bid including names and phone numbers of reference contacts.
- E. The Contractor shall maintain an accurate and complete record drawing of the system as built and specify any changes of location or installation procedures which deviate from the proposed Hunter design plans provided. All valve box locations shall be recorded with reference to a minimum of two permanent locations.
- F. Upon completion, the Contractor shall supply the as-built plan as a clean and clear document as well as all product manuals and warranties to the town of Cumberland for review and approval prior to acceptance and payment.
- G. All materials to be used in the system shall be new and without flaws or defects and of quality and performance as specified to meet the requirements of the system.
- H. PVC irrigation pipe shall be Class 200 Type 1120 SDR 21 Solvent-Weld PVC conforming to ASTM No. D2241 and D3036 as manufactured by Crestline or approved equal.
- I. PVC irrigation fittings except nipples shall be schedule 40 solvent weld fittings as manufactured by Spears or equal. All threaded PVC nipples shall be schedule 80 fittings as manufactured by Spears or equal. All PVC cement shall be IPS/weld-on used in conjunction with the appropriate primer or equal.
- J. Sprinklers shall be Hunter I-25-06-SS series full and part circle pop up rotaries with check valve 6" stainless steel riser and nozzles as indicated on provided Hunter Design Plans. Sprinkler heads shall be manufactured by Hunter Industries or equal. Swing joint risers shall be 3 ell unitized pre-fabricated double O-ring PVC as manufactured by Spears or equal.
- K. Electric control valves shall be Hunter ICV series diaphragm type fiberglass body plastic valves equipped with P/N 458 200 DC latching solenoid as required. Electric control valves shall be manufactured by Hunter Industries or equal. Valve boxes for electric valves shall be 12-inch standard valve box as manufactured by Carson or equal.

- L. Quick coupling valves shall be Hunter model HQ-SRC 1" NPT brass one piece body with thermoplastic cover, H-55 key and swivel as manufactured by Hunter Industries or equal and located as shown on the hunter design plans. Minimum of two shall be installed outside the playing area for general field irrigation needs
- M. Swing joint riser for quick coupling valves shall be 1" unitized PVC with brass inserts as manufactured by Dura or equal. Valve boxes for quick coupling valves shall be 6" round as manufactured by Carson or equal.
- N. Manual isolation gate valves for main line and each zone shall be brass body high-pressure upright screw type as manufactured by Hammond or equal. Manual valves for electric valve isolation shall be bronze body full port chrome plated ball valve 7010810 series as manufactured by Apollo or equal.
- O. Valve control wire shall be minimum #14 single conductor direct burial UL – and UF – approved and meet all state and local codes for this service. Individual wires must be used for each zone. Common wire shall be white; zone power wires shall be red. All wire shall be manufactured by Paige Electric or equal.
- P. Irrigation shall be connected to the existing Hunter Hydrowise control system located in the electrical enclosure adjacent to North Hull Street. All piping and wire installation shall be included as part of this bid.
- Q. Contractor shall add main line piping and control wire for future expansion sufficient to irrigate baseball field adjacent to the sprinklered area in this scope.
- R. SEQUENCING OF WORK TO BE PERFORMED
 - a. Installation: Prior to the installation of the root zone, the Contractor must coordinate the installation of the irrigation service lines which are located within the boundaries of the area of reconstruction. This is necessary to prevent disruption of the finished grade surface, which shall be installed after all other work within the area has been completed.
 - b. All irrigation piping and components shall be bedded and backfilled with clean and stone/rock free material. In the event of on-site soil materials not being suitable for this purpose, clean Root zone material or sand shall be imported and used for bedding and backfill. All valves both isolation and electric require a firm foundation of a 4" base layer of 3/8" drainage stone for valve and valve box support and cleanliness for future access.
 - c. Irrigation heads shall not be installed within areas of soil amendment, tilling and blending until after the seed surface preparation process has been completed and the finish grade established. Swing joint assemblies must be sealed with a suitable drilled cap and placed with the cap facing up and buried below the 12" seeding surface. Upon completion of finish grading, the system will be turned on to dampen areas of burial and indicated head locations. *Prior to acceptance, the entire irrigation system shall be tested and adjusted for approval by the Athletic Field Consultant. Note: Upon completion of the installation of the irrigation system the site shall be inspected by the Owner or Athletic Field. Consultant, or a designee for approval and acceptance of the irrigation installation.
- S. System Testing and Final Assembly
 - a. At the completion of finish root zone 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 specific grade, 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 seeding.

Any questions should be directed to Daniel Borges, Director of Public Works, at (401) 435-7701 or dborges@eastprovidenceri.gov no later than **Monday, April 22, 2024 at 4:00pm.**

Equal Opportunity/Affirmative Action Employer

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