BOARD OF CONTRACT AND SUPPLY
CITY OF PROVIDENCE, RHODE ISLAND

REQUEST FOR PROPOSALS

Item Description: NEUTACONKANUT PARK LITTLE LEAGUE FIELD IMPROVEMENTS RE-BID

Date to be opened: April 12, 2021

Issuing Department: PARKS DEPARTMENT

QUESTIONS

- Please direct questions relative to the bidding process, how to fill out forms, and how to submit a bid (Pages 1-8) to Purchasing Agent Patti Jordan.
  - Phone: (401) 680-5264
  - Email: pjordan@providenceri.gov
    - Please use the subject line "**RFP Question**"
- Please direct questions relative to the Minority and Women's Business Enterprise Program and the corresponding forms (Pages 9-13) to the MBE/WBE Outreach Director for the City of Providence, Grace Diaz
  - Phone: (401) 680-5766
  - Email: gdiaz@providenceri.gov
    - Please use subject line "**MBE WBE Forms**"
- Please direct questions relative to the specifications outlined (beginning on page 14) to the issuing department's subject matter expert:

  - **Ed Sanchez- Supervisor Project Planner**
  - **401-771-8038**
  - **Esanchez@providenceri.gov**

Pre-bid Conference (NON-MANDATORY)
March 29, 2021 at 12 PM
899 Plainfield St on the Little League Baseball field (On-Site)

BOARD OF CONTRACT AND SUPPLY
CITY OF PROVIDENCE, RHODE ISLAND

INSTRUCTIONS FOR SUBMISSION

Bids may be submitted up to **2:15 P.M.** on the above meeting date at the **Department of the City Clerk, Room 311, City Hall, 25 Dorrance Street, Providence**. At 2:15 P.M. all bids will be publicly opened and read at the Board of Contract Meeting in the City Council Chambers, on the 3rd floor of City Hall.

- Bidders must submit **2 copies** of their bid in sealed envelopes or packages labeled with the captioned **Item Description** and the **City Department to which the RFP and bid are related.** (On page 1)
- Communications to the Board of Contract and Supply that are not competitive sealed bids (i.e. product information/samples) should have "**NOT A BID**" written on the envelope or wrapper.
- Only use form versions and templates included in this RFP. If you have an old version of a form do not recycle it for use in this bid.
- The bid envelope and information relative to the bid must be addressed to:

Board of Contract and Supply
Department of the City Clerk – City Hall, Room 311
25 Dorrance Street
Providence, RI 02903

****PLEASE NOTE: This bid may include details regarding information that you will need to provide (such as proof of licenses) to the issuing department before the formalization of an award.**

This information is NOT requested to be provided in your initial bid by design.

All bids submitted to the City Clerk become public record. Failure to follow instructions could result in information considered private being posted to the city's Open Meetings Portal and made available as a public record. The City has made a conscious effort to avoid the posting of sensitive information on the City's Open Meetings Portal, by requesting that such sensitive information be submitted to the issuing department only at their request.

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BID PACKAGE CHECKLIST

Digital forms are available in the City of Providence Purchasing Department Office or online at **http://www.providenceri.gov/purchasing/how-to-submit-a-bid/**

The bid package **MUST** include the following, in this order:

- Bid Form 1: Bidder's Blank as the cover page/ 1st page (*see page 6 of this document*)
- Bid Form 2: Certification of Bidder as 2nd page (*see page 7 of this document*)
- Certificate Regarding Public Records (*see page 8 of this document)*
- Forms from the Minority and Women Business Enterprise Program: Based on Bidder Category. *See forms and instructions enclosed (pages 9-13) or on: https://www.providenceri.gov/purchasing/minority-women-owned-business-mbewbe-procurement-program/*

***Please note: MBE/WBE forms must be completed for EVERY bid submitted and must be inclusive of ALL required signatures. Forms without all required signatures will be considered incomplete.**

- Bidder's Proposal/Packet: Formal response to the specifications outlined in this RFP, including pricing information and details related to the good(s) or service(s) being provided. Please be mindful of formatting responses as requested to ensure clarity.
- Financial Assurance, *if requested* (*as indicated on page 5 of this document under "Bid Terms")*

All of the above listed documents are REQUIRED. (With the exception of financial assurances, which are only required if specified on page 5.)

****Failure to meet specified deadlines, follow specific submission instructions, or enclose all required documents with all applicable signatures will result in disqualification, or in an inability to appropriately evaluate bids.***

BOARD OF CONTRACT AND SUPPLY
CITY OF PROVIDENCE, RHODE ISLAND

NOTICE TO VENDORS

1. The Board of Contract and Supply will make the award to the lowest qualified and responsible bidder.
2. In determining the lowest responsible bidder, cash discounts based on preferable payment terms will not be considered.
3. Where prices are the same, the Board of Contract and Supply reserves the right to award to one bidder, or to split the award.
4. No proposal will be accepted if the bid is made in collusion with any other bidder.
5. Bids may be submitted on an "equal in quality" basis. The City reserves the right to decide equality. Bidders must indicate brand or the make being offered and submit detailed specifications if other than brand requested.
6. A bidder who is an out-of-state corporation shall qualify or register to transact business in this State, in accordance with the Rhode Island Business Corporation Act, RIGL Sec. 7-1.2-1401, et seq.
7. The Board of Contract and Supply reserves the right to reject any and all bids.
8. Competing bids may be viewed in person at the Department of the City Clerk, City Hall, Providence, immediately upon the conclusion of the formal Board of Contract and Supply meeting during which the bids were unsealed/opened. Bids may also be accessed electronically on the internet via the City's Open Meetings Portal.
9. As the City of Providence is exempt from the payment of Federal Excise Taxes and Rhode Island Sales Tax, prices quoted are not to include these taxes.
10. In case of error in the extension of prices quoted, the unit price will govern.
11. The contractor will **NOT** be permitted to: a) assign or underlet the contract, or b) assign either legally or equitably any monies or any claim thereto without the previous written consent of the City Purchasing Director.
12. Delivery dates must be shown in the bid. If no delivery date is specified, it will be assumed that an immediate delivery from stock will be made.
13. A certificate of insurance will normally be required of a successful vendor.
14. For many contracts involving construction, alteration and/or repair work, State law provisions concerning payment of prevailing wage rates apply (RIGL Sec. 37-13-1 et seq.)
15. No goods should be delivered, or work started without a Purchase Order.
16. **Submit 2 copies of the bid to the City Clerk, unless the specification section of this document indicates otherwise.**
17. Bidder must certify that it does not unlawfully discriminate on the basis of race, color, national origin, gender, gender identity or expression, sexual orientation and/or religion in its business and hiring practices and that all of its employees are lawfully employed under all applicable federal, state and local laws, rules and regulations. (See Bid Form 2.)

BOARD OF CONTRACT AND SUPPLY
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BID TERMS

1. Financial assurances may be required in order to be a successful bidder for Commodity or Construction and Service contracts. If either of the first two checkboxes below is checked, the specified assurance **must accompany** a bid, or the bid will not be considered by the Board of Contract and Supply. The third checkbox indicates the lowest responsible bidder will be contacted and required to post a bond to be awarded the contract.

   a) ☐ A certified check for $_____ must be deposited with the City Clerk as a guarantee that the Contract will be signed and delivered by the bidder.

   b) ☒ A bid bond in the amount of **5** per centum (%) of the proposed total price, must be deposited with the City Clerk as a guarantee that the contract will be signed and delivered by the bidder; and the amount of such bid bond shall be retained for the use of the City as liquidated damages in case of default.

   c) ☒ A performance and payment bond with a satisfactory surety company will be posted by the bidder in a sum equal to one hundred per centum (100%) of the awarded contract.

   d) ☐ No financial assurance is necessary for this item.

2. Awards will be made within **sixty (60) days of bid opening**. All bid prices will be considered firm, unless qualified otherwise. Requests for price increases will not be honored.
3. Failure to deliver within the time quoted or failure to meet specifications may result in default in accordance with the general specifications. It is agreed that deliveries and/or completion are subject to strikes, lockouts, accidents, and Acts of God.

The following entry applies only for COMMODITY BID TERMS:

4. Payment for partial delivery will not be allowed except when provided for in blanket or term contracts.

The following entries apply only for CONSTRUCTION AND SERVICE BID TERMS:

5. Only one shipping charge will be applied in the event of partial deliveries for blanket or term contracts.
6. Prior to commencing performance under the contract, the successful bidder shall attest to compliance with the provisions of the Rhode Island Worker's Compensation Act, RIGL 28-29-1, et seq. If exempt from compliance, the successful bidder shall submit a sworn Affidavit by a corporate officer to that effect, which shall accompany the signed contract.
7. Prior to commencing performance under the contract, the successful bidder shall, submit a certificate of insurance, in a form and in an amount satisfactory to the City.

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BID FORM 1: Bidders Blank

1. Bids must meet the attached specifications. Any exceptions or modifications must be noted and fully explained.
2. Bidder's responses must be in ink or typewritten, and all blanks on the bid form should be completed.
3. The price or prices proposed should be stated both in **WRITING** and in **FIGURES**, and any proposal not so stated may be rejected. **Contracts exceeding twelve months must specify annual costs for each year.**
4. Bids **SHOULD BE TOTALED** so that the final cost is clearly stated (unless submitting a unit price bid), however **each item should be priced individually**. Do not group items. Awards may be made on the basis of ***total*** bid or by ***individual items***.
5. All bids **MUST BE SIGNED IN INK.**

Name of Bidder (Firm or Individual): _____

Contact Name: _____

Business Address: _____

Business Phone #: _____

E-Mail Address: _____

Agrees to bid on (Items(s) to be bid): _____

If the bidder's company is based in a state *other than Rhode Island*, list name and contact information for a local agent for service of process that ***is located within Rhode Island***: _____

Please visit http://www.naics.com/search/ and identify the NAICS Code(s) for items being bid on. Enter the NAICS code(s) here or in parentheses next to each item listed immediately above: _____

Delivery Date (when applicable): _____

Name of Surety Company (if applicable): _____

Total Amount in Writing*: _____

Total Amount in Figures*: _____

**If you are submitting a unit price bid please insert "Unit Price Bid."*

Use additional pages if necessary, for additional bidding details.

_____

Signature of Representative

_____

Title

BOARD OF CONTRACT AND SUPPLY
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BID FORM 2: Certification of Bidder
(Non-Discrimination/Hiring)

Upon behalf of_____(Firm or Individual Bidding),

I,_____(Name of Person Making Certification),

being its_____(Title or "Self"), hereby certify that:

1. Bidder does not unlawfully discriminate on the basis of race, color, national origin, gender, sexual orientation and/or religion in its business and hiring practices.
2. All of Bidder's employees have been hired in compliance with all applicable federal, state and local laws, rules and regulations.

I affirm by signing below that I am duly authorized on behalf of Bidder, on this_____day of_____20____.

_____
Signature of Representative

_____
Printed Name

BOARD OF CONTRACT AND SUPPLY
CITY OF PROVIDENCE, RHODE ISLAND

Certificate Regarding Public Records

Upon behalf of_____(Firm or Individual Bidding),

I,_____(Name of Person Making Certification),

being its_____(Title or "Self"), hereby certify an understanding that:

1. All bids submitted in response to Requests for Proposals (RFP's) and Requests for Qualification (RFQ's), documents contained within, and the details outlined on those documents become public record upon receipt by the City Clerk's office and opening at the corresponding Board of Contract and Supply (BOCS) meeting.
2. The Purchasing Department and the issuing department for this RFP/RFQ have made a conscious effort to request that sensitive/personal information be submitted directly to the issuing department and only at request if verification of specific details is critical the evaluation of a vendor's bid.
3. The requested supplemental information may be crucial to evaluating bids. Failure to provide such details may result in disqualification, or an inability to appropriately evaluate bids.
4. If sensitive information that has not been requested is enclosed or if a bidder opts to enclose the defined supplemental information prior to the issuing department's request in the bidding packet submitted to the City Clerk, the City of Providence has no obligation to redact those details and bears no liability associated with the information becoming public record.
5. The City of Providence observes a public and transparent bidding process. Information required in the bidding packet may not be submitted directly to the issuing department at the discretion of the bidder in order to protect other information, such as pricing terms, from becoming public. Bidders who make such an attempt will be disqualified.

I affirm by signing below that I am duly authorized on behalf of Bidder, on this_____day of_____20____.

_____
Signature of Representative

_____
Printed Name

BOARD OF CONTRACT AND SUPPLY
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WBE/MBE Form Instructions

The City of Providence actively seeks Minority and Women business enterprises to participate in bids to meet the City's procurement needs. Pursuant to the City of Providence Code of Ordinances, Chapter 21, Article II, Sec. 21-52 (Minority and Women's Business Enterprise) and Rhode Island General Laws (as amended), Chapter 31-14, et seq. (Minority Business Enterprise), Minority Business Enterprise (MBE) and Women's Business Enterprise (WBE) participation goals apply to contracts.

The goal for Minority Business Enterprise (MBE) participation is **10%** of the total bid value.
The goal for Women's Business Enterprise (WBE) participation is **10%** of the total bid value.
The goal for combined MBE/WBE participation is **20%** of the total bid value.

Only businesses certified with the State of Rhode Island as minority and/or women business enterprises are counted towards the City's goals. Eligible minority or women-owned businesses are encouraged to seek certification from the State of Rhode Island Minority Business Enterprise Compliance Office at: http://odeo.ri.gov/offices/mbeco/

Note: MBE certification with the State of Rhode Island on the basis of Portuguese heritage is not currently recognized by the City of Providence's MBE program.

Bid Requirements:

All Bidders: All bidders must complete and submit the ***MBE/WBE Participation Affidavit*** indicating whether or not they are a state-certified MBE/WBE and acknowledging the City's participation goals. Submission of this form is required with **every bid**. Your bid will not be accepted without an affidavit.

Bidders who will be subcontracting: Bidders who will be subcontracting must submit the ***Subcontractor Disclosure Form*** as part of their bid submission. All subcontractors, regardless of MBE/WBE status, must be listed on this form. Business NAICS codes can be found at https://www.naics.com/search/. Awarded bidders are required to submit ***Subcontractor Utilization and Payment Reports*** with each invoice.

Waiver Requests:

If the percentage of the total amount of the bid being awarded to MBE or WBE vendors is less than 20% (Box F on the Subcontractor Disclosure Form) and the prime contractor is not a Rhode Island State-certified MBE or WBE, the Bidder must complete the *MBE/WBE Waiver Request Form* for review. Waivers will be considered on a case by case basis.

No waiver will be granted unless the waiver request includes documentation that demonstrates that the Bidder has made good faith efforts to achieve the City's stated participation goals. Waivers must be reviewed and signed by the City of Providence's MBE/WBE Outreach Director, Grace Diaz, or her designee. Department Directors cannot recommend a bidder for award if this form is applicable and absent. If the bid does not meet the participation goals of the City of Providence and a waiver is not filed with the signature of the MBE/WBE Outreach Director or her designee, the bid will not be accepted.

Verifying MBE/WBE Certification

It is the responsibility of the bidder to confirm that every MBE/WBE named in a proposal and included in a contract is certified by the Rhode Island Minority Business Enterprise Compliance office. The current MBE/WBE directory is available at the State of RI MBE Office, One Capitol Hill, 2nd Floor, Providence, RI, or online at http://odeo.ri.gov/offices/mbeco/mbe-wbe.php. You can also call (401) 574-8670 to verify certification, expiration dates, and services that the MBE/WBE is certified to provide. Note: MBE certification with the State of Rhode Island on the basis of Portuguese heritage is not currently recognized by the City of Providence's MBE program.

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Form Instructions:

Access all bid forms from http://www.providenceri.gov/oeo/ or http://www.providenceri.gov/purchasing/minority-women-owned-business-mbewbe-procurement-program/. **Download** the forms as blank PDFs. Once saved on your computer, fill them out using the Adobe program. The fillable PDFs must be completed in Adobe in order to be saved property. Google Chrome and similar platforms do not allow for the forms to be saved as filled PDFs. Therefore, please download the blank forms to your computer, then fill them out and save.

Assistance with Form Requirements

Examples of completed forms can be found on the City of Providence website at http://www.providenceri.gov/oeo/ or http://www.providenceri.gov/purchasing/minority-women-owned-business-mbewbe-procurement-program/.

Contract Requirements:

Prime contractors engaging subcontractors must submit the ***Subcontractor Utilization and Payment Report*** to the City Department's Fiscal Agent with every invoice and with request for final payment. This form is not submitted as a part of the initial bid package.

For contracts with duration of less than 3 months, this form must be submitted along with the contractor's request for final payment. The form must include all subcontractors utilized on the contract, both MBE/WBE and non- MBE/WBE, the total amount paid to each subcontractor for the given period and to date. During the term of the contract, any unjustified failure to comply with the MBE/WBE participation requirements is a material breach of contract.

Questions?

For more information or for assistance with MBE/WBE Forms, contact the City of Providence MBE/WBE Outreach Director, Grace Diaz, at mbe-wbe@providenceri.com or (401) 680-5766.

BOARD OF CONTRACT AND SUPPLY
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MBE/WBE PARTICIPATION AFFIDAVIT
Item Discussion (as seen on RFP):

_____

_____

_____

Prime Bidder: _____
Prime Bidder (Company) Phone Number: _____
Prime Bidder (Company) Zip Code: _____

Which one of the following describes your business' status in terms of Minority and/or Woman-Owned Business Enterprise certification with the State of Rhode Island? _____MBE _____WBE _____Neither MBE nor WBE

By initialing the following sections and signing the bottom of this document in my capacity as the contractor or an authorized representative of contractor, I make this Affidavit:
It is the policy of the City of Providence that minority business enterprises (MBEs) and women business enterprises (WBEs) should have the maximum opportunity to participate in procurements and projects as prime contractors and vendors. Pursuant to Sec. 21-52 of the Providence Code of Ordinances and Chapter 31-14 *et seq.* of the Rhode Island General Laws (as amended), MBE and WBE participation goals apply to contracts.

The goal for Minority Business Enterprise (MBE) participation is 10% of the total bid value.
The goal for Women's Business Enterprise (WBE) participation is 10% of the total bid value.
The goal for combined MBE/WBE participation is 20% of the total bid value.

I acknowledge the City of Providence's goals of supporting MBE/WBE certified businesses. Initial _____
If awarded the contract, I understand that my company must submit to the Minority and Women's Business Coordinator at the City of Providence (MBE/WBE Office), copies of all executed agreements with the subcontractor(s) being utilized to achieve the participation goals and other requirements of the RI General Laws. **I understand that these documents must be submitted prior to the issuance of a notice to proceed.** Initial _____

I understand that, if awarded the contract, my firm must submit to the MBE/WBE Office canceled checks and reports required by the MBE/WBE Office on a quarterly basis verifying payments to the subcontractors(s) utilized on the contract.
Initial _____

If I am awarded this contract and find that I am unable to utilize the subcontractor(s) identified in my Statement of Intent, I understand that I must substitute another certified MBE and WBE firm(s) to meet the participation goals. **I understand that I may not make a substitution until I have obtained the written approval of the MBE/WBE Office.**
Initial _____

If awarded this contract, I understand that authorized representatives of the City of Providence may examine the books, records and files of my firm from time to time, to the extent that such material is relevant to a determination of whether my firm is complying with the City's MBE/WBE participation requirements.
Initial _____

I do solemnly declare and affirm under the penalty of perjury that the contents of the foregoing Affidavit are true and correct to the best of my knowledge, information and belief.

_____ _____
Signature of Bidder Printed Name

_____ _____
Company Name Date

BOARD OF CONTRACT AND SUPPLY
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SUBCONTRACTOR DISCLOSURE FORM

Fill out this form only if you WILL SUBCONTRACT with other parties. If you will not subcontract any portion of the proposed bid, do not fill out this form.

Prime Bidder: _____ Primary NAICS Code: _____

Item Description (as seen on RFP):

_____

_____

Please list all Subcontractors below. Include the total dollar value that you propose to share with each subcontractor and the dollar amount to be subcontracted. Please check off MBE and WBE where applicable. The directory of all state-certified MBE/WBE firms is located at www.mbe.ri.gov. Business NAICS codes can be found at https://www.naics.com/search/

Proposed Subcontractor	MBE	WBE	Primary NAICS Code	Date of Mobilization	$ Value of Subcontract
					$
					$
					$
					$
					$
					$
A. MBE SUBCONTRACTED AMOUNT:					$
B. WBE SUBCONTRACTED AMOUNT:					$
C. NON MBE WBE SUBCONTRACTED AMOUNT:					$
D. DOLLAR AMOUNT OF WORK DONE BY THE PRIME CONTRACTOR:					$
E. TOTAL AMOUNT OF BID (SUM OF A, B, & C):					$
F. PERCENTAGE OF BID SUBCONTRACTED TO MBEs AND WBEs. (Divide A by D and multiply result by 100).					%

Please read and initial the following statement acknowledging you understand. If the percentage of the total amount of the bid being awarded to MBE or WBE vendors is less than 20% (Box F) and the prime contractor is NOT a Rhode Island State-certified MBE or WBE, **you must fill out the MBE/WBE WAIVER REQUEST FORM for consideration by City of Providence MBE/WBE Outreach Director.** Initial _____

_____ _____

Signature of Prime Contractor | Printed Name | Date Signed

BOARD OF CONTRACT AND SUPPLY
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MBE/WBE WAIVER REQUEST FORM

Fill out this form only if you are subcontracting and did not meet the 20% MBE/WBE participation goal.
State-certified MBE or WBE Prime Bidders are NOT REQUIRED to fill out this form.

Submit this form to the City of Providence MBE/WBE Outreach Director, Grace Diaz, at mbe-wbe@providenceri.gov, for review **prior to bid submission.** This waiver applies only to the current bid which you are submitting to the City of Providence and does not apply to other bids your company may submit in the future.

Prime Bidder: _____
Company Trade: _____
Item Discussion (as seen on RFP):
_____
_____
_____

To receive a waiver, you must list the certified MBE and/or WBE companies you contacted, the name of the primary individual with whom you interacted, and the reason the MBE/WBE company could not participate on this project.

MBE/WBE Company Name	Individual's Name	Company Trade	Why did you choose not to work with this company?

I acknowledge the City of Providence's goal of a combined MBE/WBE participation is 20% of the total bid value. I am requesting a waiver of _____ % MBE/WBE (20% minus the value of **Box F** on the Subcontractor Disclosure Form). If an opportunity is identified to subcontract any task associated with the fulfillment of this contract, a good faith effort will be made to select MBE/WBE certified businesses as partners.

_____	_____	_____
Signature of Prime Contractor	Printed Name	Date Signed
_____	_____	_____
Signature of City of Providence MBE/WBE Outreach Director	Printed Name of City of Providence MBE/WBE Outreach Director	Date Signed

BOARD OF CONTRACT AND SUPPLY
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SUPPLEMENTAL INFORMATION

If the issuing department for this RFP determines that your firm's bid is best suited to accommodate their need, you will be asked to provide proof of the following prior to formalizing an award.

An inability to provide the outlined items at the request of the department may lead to the disqualification of your bid.

This information is NOT requested to be provided in your initial bid that you will submit to the City Clerk's office by the "date to be opened" noted on page 1. This list only serves as a list of items that your firm should be ready to provide on request.

All bids submitted to the City Clerk become public record. Failure to follow instructions could result in information considered private being posted to the city's Open Meetings Portal and made available as a public record.

You must be able to provide:

- Business Tax ID will be requested after an award is approved by the Board of Contract and Supply.
- Proof of Insurance

BOARD OF CONTRACT AND SUPPLY
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BID FORM 3: Supplemental Bid Form

To whom it may concern:

1. The undersigned, having familiarized (himself) (themselves) (itself) with the **NEUATACONKANUT PARK LITTLE LEAGUE FIELD IMPROVEMENTS PROJECT RE-BID** bid affecting the cost of work, and with the Contract Documents (which includes the Invitation for Bids, Instructions to Bidders, Form of Bid Bond, Form of Agreements, form of Non-Collusive Affidavit, Addenda (if any), Drawings, Technical Specification, Form of Surety Bond(s); as prepared by the Providence Parks Department, and on file in the office of the City Clerk 3rd Floor, City Hall, Providence, RI 02903, hereby proposes to furnish all supervision, technical personnel, labor, materials, machinery, tools, equipment and services including utility and transportation services, and to perform such other required work for the **NEUTACONKANUT PARK LITTLE LEAGUE FIELD IMPROVEMENTS PROJECT RE-BID** and such other required and incidental work, complete, all in accordance with the above listed documents and for the unit prices for work in-place for the following items and quantities.

2. In submitting this Bid, the bidder understands that the right is reserved by The Providence Parks Department to reject any and all Bids, If written notice of acceptance of this Bid is mailed, telegraphed or delivered to the undersigned within (90) days after the opening thereof, or at any time thereafter before this Bid is withdrawn, the undersigned agrees to execute and deliver an Agreement in the prescribed form and furnish the required bond within (10) days after the Agreement is presented to him/her for signature.

Herewith in accordance with the instructions to Bidders.

3. Attached hereto is an affidavit in proof that the undersigned has not colluded with any person in respect to this. Bid or any bids for the Contractor for which this Bid is submitted. Also attached is a Statement of Bidder's Qualifications.

4. Application unit prices are contained in the Agreement (established as the result of either a Unit Price Bid or a Supplemental Schedule of Unit Prices), the City of Providence may order the Contractor to proceed with desired changes in the work, the value of such changes to be determined by the measured quantities involved and the application unit prices specified in the Contract.

5. The City of Providence reserves the right to determine the lowest responsible Bidder based on past experience with the City and/or recommendations by City and/or state agencies with an interest in this procurement. The City reserves the right to award the project to the appropriate bidder in the best interest of the City of Providence.

CERTIFICATION OF NON-SEGREGATED FACILITIES

The Bidder certifies that he/she does not maintain or provide for his/her employees any segregated facilities at any of his establishments, and that he/she does not permit his/her employees to perform their services at any location, under his/her control, where segregation facilities are maintained. The Bidder agrees that a breach of this certification will be a violation of the Equal Opportunity Clause in any contract resulting from acceptance of this Bid. As used in this certification, term "segregation facilities" means any waiting rooms, work rooms, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities provided for employee which are segregated by explicit directive or are in fact segregated on basis of race, color, religion, or national origin, because of habit, local custom, or otherwise. The Bidder agrees that (except where he/she has obtained identical certification from proposed subcontractors for specific time periods) he/she will obtain identical certification from proposed subcontractor prior to the award of subcontracts exceeding $10,000.00 which are not exempt from provisions of the Equal Opportunity Clause, and that he /she will retain such certifications in his/her files.

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. & 1001.

DATE _____, **20**___

Name of Bidder and Official Address:

_____

Name of Authorized Representative (Contact):

_____

BOARD OF CONTRACT AND SUPPLY
CITY OF PROVIDENCE, RHODE ISLAND

_____ By _____
(Signature)

_____ Title _____

E-Mail: _____ **Phone:** _____

Bidder shall indicate, in space provided,
the earliest possible Project Start-up Date: _____, **20** ____

ADDENDA: The undersigned acknowledges receipt of the following Addenda, if any, and has included the provisions thereof in this Bid (If Any):

Addendum No.	Date	Addendum No.	Date
_____	_____, 20 ____	_____	_____, 20 ____
_____	_____, 20 ____	_____	_____, 20 ____

Sub-Contractors (If Any):

Name: _____ **Scope of Work:** _____ **MBE / WBE**

Name: _____ **Scope of Work:** _____ **MBE / WBE**

Name: _____ **Scope of Work:** _____ **MBE / WBE**

BOARD OF CONTRACT AND SUPPLY
CITY OF PROVIDENCE, RHODE ISLAND

SUPPLEMENTAL BID FORM

NEUTACONKANUT PARK ATHLETIC FIELD IMPROVEMENTS PROJECT RE-BID

BASE BID:
Neutaconkanut Park is located at 899 Plainfield Street in Providence on Plat 111 Lot 94. Parks Department is seeking qualify bidders with landscape construction experience in athletic fields construction. All Contractors shall possess substantial credentials in good standing and be able to perform task as describe in this Bid. Contractor shall be familiar with all Local and State Regulations to ensure public health and safety.

The Providence Parks Department is seeking qualified contractors to provide construction services to improve existing Little League baseball field. Proposed work will include but not limited to earthwork, irrigation, new water meter service with enclosure cabinet, diamond infield layout, flag pole, partial meter pit deconstruction, seeding and sod installation. Newly sod and seeded outfield will be protected to ensure turf growth upon satisfactory. (See Plan Set Attachment A and Technical Specs Attachment B)

In addition to stating the Total Base Bid, The bidder shall state Unit Prices for related work listed under each bid item which represents the work items included in the Total Base Bid. The Unit Prices are quoted for computing adjustments to the Base Bid prior to Contract award, as well as during construction, based upon extra work ordered by the City or for work countermanded, reduced or omitted by the City to stay within the Project budget.

Base Bid Items and Unit prices are to be Completed prices to be added or deducted based on quantities of work involved, for each item in place in the unit indicated.

All charges against the allowance must be approved in writing and billed as directed by the owner. Allowance balance return to owner.

BASE BID: The proposed work includes complete furnishing and applying infield mix, loam, sod, irrigation, bases, new water meter service, enclosure box, flag pole, barrier netting and partial meter pit removal.

All Work Included in this Project Shall be Completed for the lump sum of:

_____ **Dollars**

($_____), TOTAL BASE BID

OWNER'S ALLOWANCE:

_____ Five Thousand dollars _____ **Dollars**

($_____5,000_____), ALLOWANCE

BASE BID WITH ALLOWANCE:

_____ **Dollars**

($_____), TOTAL BASE BID

BIDDER: _____

ADD ALTERNATES:

1. **ADD ALT # 1 – F&I Beacon Athletics Inc. Barrier Netting pully systems (Scope of Work Complete) - Per Lump Sum***

_____ LS $_____

price in writing

2. **ADD ALT # 2 –R&D existing and F&I 25 Ft Height Commercial Grade Flagpole with Base, Flag, Led Solar Disc and Accessories. (Scope of Work Complete) - Per Lump Sum**

_____ LS $_____

price in writing

3. **ADD ALT # 3 – R&D entire dugout mesh only terminate edge of backstop. F&I with 9-gauge black vinyl chain link mesh and hardware. (Scope of Work Complete) – Per Lump Sum**

_____ LS $_____

price in writing

4. **ADD ALT # 4- R&D existing and Renovate Backstop with Black Vinyl Mesh, from mid rail below use 6-gauge, from mid rail above use 9-gauge upper section. (Scope of Work Complete) – Per Lump Sum**

_____ LS $_____

price in writing

5. **ADD ALT # 5 – R&D existing service gate. F&I new service gate with 9-gauge galvanize mesh, hardware, hinges with drop bar. (Scope of Work Complete) – Per Lump Sum**

_____ LS $_____

price in writing

6. **ADD ALT # 6 –R&D Existing Sliding Gate, Post and Foundation. Loam and Seed Disturb Area. (Scope of Work Complete) - Per Lump Sum**

_____ LS $_____

price in writing

7. **ADD ALT # 7 – R&D existing 4' Ft. chain link fence. F&I with a 5'ft black vinyl 9-gauge mesh and hardware. Reuse galvanized vertical post and rails as needed. (Scope of Work Complete) – Per Lump Sum**

_____ LS $_____

price in writing

8. **ADD ALT # 3 – F&I (Yellow) Poly-Cap Fence Guard Protection (Complete) – Per Lump Sum**

_____ LS $_____

price in writing

BIDDER: _____

UNIT PRICES:

1. **F&I Water meter, backflow, dual check valve, drain valves, curb stop and Aluminum Enclosure box (Model#SBBC-75ALHP) with concrete pad (Complete) – Per Lump Sum**

_____ LS $_____

price in writing

2. **Furnish and Install Complete Irrigation System as Specified (Excluding Water Meter, Backflow and Enclosure) per plan (Compete) - Per Lump Sum**

_____ LS $_____

price in writing

3. **Furnish and Install Athletic Field Hydroseed Mix as specified (Complete) – Per Square Foot**

_____ SF $_____

price in writing

4. **Furnish and Install Sod at infield/outfield line as specified (Standard Roll Complete) - per Square Foot**

_____ SF $_____

price in writing

5. **Furnish and Install 3/4" screened loam (Complete in place) - per Cubic Yard**

_____ CY $_____

price in writing

6. **Furnish and Install Clay Infield Mix (Complete in place) - per Cubic Yard**

_____ CY $_____

price in writing

7. **Furnish and Install Erosion Control - Straw Wattle (Complete in place) - per Linear Foot**

_____ LF $_____

price in writing

BIDDER: _____

8. **Furnish and Install High Visible Construction Snow Fence (Complete in place) - per Linear Foot**

_____ LF $_____

price in writing

9. **Remove and Dispose 4' galvanized Chain Link Fence Mesh - per Linear Foot**

_____ LF $_____

price in writing

10. **Furnish and Install 5' Black Vinyl Chain Link Fence Mesh (Complete in place) - per Linear Foot**

_____ LF $_____

price in writing

11. **Furnish and Install (Yellow) Poly-Cap Fence Guard Protection (Complete) - per Linear Foot**

_____ LF $_____

price in writing

12. **Scrape, Prime and Brush (2) coats outdoor zinc yellow paint (2) foul poles (Complete) - per Lump Sum**

_____ LS $_____

price in writing

13. **F&I 5' ft height 9-gauge black vinyl mesh single leaf swing gate and hardware (Complete) - per Lump Sum**

_____ LS $_____

price in writing

14. **F&I 5' ft height 9-gauge black vinyl mesh double leaf swing gate and hardware (Complete) - per Lump Sum**

_____ LS $_____

price in writing

BIDDER: _____

Please note that the list above is not intended to include all items required to complete the base bid scope of work but can and shall be used to adjust the contract prior to or after award – in the best interest of the City of Providence.

BOARD OF CONTRACT AND SUPPLY
CITY OF PROVIDENCE, RHODE ISLAND

BID DOCUMENTS:

The complete set of Bid Documents consists of the Bid Form, Technical Specifications, Minority Participation Forms, and the following Drawings:

DRAWINGS:

1. **L1 - Tittle Sheet**
2. **L2 - Existing Conditions Plan**
3. **L3 - Demolition Plan**
4. **L4 - Irrigation Plan**
5. **L5 - Grading Plan**
6. **L6 - Site Construction Layout Plan**
7. **L7 - Little League Infield Layout Plan**
8. **L8 - Detail Sheet 1**
9. **L9 - Detail Sheet 2**
10. **L10 - Detail Sheet 3**

TECHNICAL SPECIFICATION:

- **010000 - General Requirements**
- **015639 - Temporary Tree and Planting Protection**
- **024119 - Selective Demolition**
- **107500 - Flagpoles**
- **312213 - Rough Grading**
- **312316.13 - Trenching**
- **312500 - Erosion and Sedimentation Controls**
- **321823.10 - Infield Skin Surface**
- **323133 - Chain Link Fences and Gates 323133.33 - Chain Link Baseball Backstop**
- **328400 - Planting Irrigation**
- **329219 - Seeding**
- **329223 - Sodding**

ADDITIONAL INFORMATION REQUIRED WITH BID:

- Qualifications to Perform Work – See Form Below for Information Required
- Minority Participation Forms – 10% MBE / 10 % WBE Goal on this Project
- Addenda (If Any) - Must Be Acknowledged on Bid Form
- Product Information for Items Submitted as 'Or Equal' to Specified Materials
-

PROVISIONS OF THIS PROJECT:

- Upon the Issuance of the Award from the Board of Contract – the City shall issue a Contract to be executed by the City and the vendor incorporating the bid specifications. All Provisions of the Specifications are binding.

- Any Permits Required by the City of Providence and/or State of Rhode Island Shall be Obtained by the Vendor – Permit Fees by the City of Providence Shall be Waived – the State ADA Fee Must be Paid
- The Davis Bacon Act Applies (HUD Projects) – Prevailing Wages Must Be Paid for On Site Hours – On-Site Interviews will be Conducted During the Project – Employees Shall be Advised of the Prevailing Wage Rates Prior to Mobilization on Site
- Certified payrolls Must be Submitted With Pay Requests Including Monthly Utilizations Form
- Performance and Payment Bonds (If Required) Must be Submitted within 10 Days of Award or Bid Bond Will be Forfeited
- An Insurance Certificate Shall be Submitted to the City Within 10 Days of Award
- A Copy of the Vendors Contractor's License Must be Submitted within 10 Days of Award
- All On-Site Personnel Shall be Licensed (If Required) and Shall have Proof of All Licenses Required by the State of Rhode Island to Perform the Work Required
- Pay Requests Must be Submitted on Approved AIA Billing Documents (City will Provide if Needed)
- All Subcontractors Shall be Listed on the Bid Form – All Insurance & Payroll Requirements Apply
    - General Contractor Shall be the Insurance Certificate Holder and the City Shall be Named as 'Additionally Insured' with Respect to Liability Insurance
- A Submittal Log Must be Submitted within 10 Days of Award

CLOSE OUT DOCUMENTS:

- Prior to Final Payment the Vendor Shall Provide the Following:
    - Copies of Permits Signed off and Approved (If Any)
    - Operating Manuals and Warranties Shall Be Transferred and/or Delivered
    - Full and Completed As-Built Drawings Shall be Submitted for Approval
    - Training Shall be Provided to City Personnel (If Required)
    - Certification by Manufactures Representative (If Required)

QUALIFICATIONS:

Qualifications will be evaluated on the basis of similar project experience for:

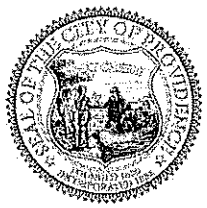
a. Completion of at least 3 similar projects within the past five years.
b. Size and dollar value of similar completed projects.
c. Contractor's performance with similar projects. (references will be checked)
d.. Relevant experience of individuals assigned to the project.

Questions regarding this bid package shall be submitted via e-mail to **Patti Jordan** at pjordan@providenceri.gov and **Megan Gardner**, Design Team Manager at mgardner@providenceri.gov, no later than five (5) working days before the bid opening date.

Ed Sanchez is the project contact and can be reached at 401-771-8038.

COVID-19 PROTOCOLS

At all times while on city property (site) all personnel shall follow all policies and procedures to be in compliance with the RI Department of Health, the CDC and City of Providence Covid-19 protocol.



BOARD OF CONTRACT AND SUPPLY
CITY OF PROVIDENCE, RHODE ISLAND

TECHNICAL SPECIFICATIONS

This project qualifies for prevailing wages per the Prevailing Wages Statute or the Davis Bacon Act (HUD). Certified payrolls will need to be submitted to the owner for all hours worked on site for this project. The Wage Decision for this project shall be as recorded on the Bid Date and is available on the RI Department of Labor website.

Federal Labor Standards
U.S. Department of Housing & Urban Development

Applicability

The Project of Program to which the Construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A.1. (i) Minimum Wages. All laborers and mechanics employed or working up on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction of development of the project) will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers of mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification or work actually performed, without regard to skill, excepts as provided in 29 CFR Part 5.5 (a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFT part 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contact shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withhold from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much that the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract. HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) Payrolls and basic records. Payrolls and basic record relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonable anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) or the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits ins enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii) (a) The contractor shall submit weekly for each in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor or owner, as the case may be, for transmission to HUD or its designee. The

payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR Part 5.5(a)(3)(i). This information may be submitted in any form desired. Optional Form WH-34 is available for this purpose and may be purchases from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), Government Printing Office, Washington, Dc 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be maintained under 20 CFR Part 5.5 (a)(3)(i) and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less that the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a property executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph AA.3. (ii)(b) of this section.

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code. (iii) The contractor of subcontractor shall make the records required under paragraph A.3. (i) of this section available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR Part 5.12.

4. (i) Apprentices and Trainees. Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprentice program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the age determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the even the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by

the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less that the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirement of Executive Order 11246, s amended, and 29 CFR Part 30.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor will insert in any subcontract the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as HUD or its designee may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all contract clauses in 29 CFR Part 5.5

7. Contracts termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor as provided in 29 CFR 5.12

8. Compliance with Davis-Bacon and Related Act Requirements. All ruling and interpretations of the Davis-Bacon and Related Act contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (i) Certification of Eligibility. By entering in to this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act of 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty to making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1010, Title 18, U.S.C., "Federal Housing Administration transaction", provides in part: "Whoever, for the purpose of ...influencing in any way the action of such Administration...makes, utter of publishes any statement, knowing the same to be false...shall be fined not more than $5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work I excess of forty hours I such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) or this paragraph, the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of $25 for each calendar day on which such individual was required or permitted to work in excess of forty hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

(3) Withholding for unpaid wages for liquidated damages. HUD or its designees shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold of cause to be withheld form any moneys payable on account of work performed by the contractor or subcontractor under any such contract or nay other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidates damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety

(1) No laborer or mechanic shall be required to work in surrounding or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 (formerly Part 1518) and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (Public Law 91-54, 83 Stat. 96).

(3) The Contractor shall include the provisions of this Article in every subcontract so that such provisions will be binding on each subcontractor. The Contractor shall take such action with respect to any subcontract as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

Questions regarding this bid shall be sent via e-mail to Ed Sanchez at esanchez@providenceri.gov. Questions and responses will be sent to all bidders.

"General Decision Number: RI20200001 11/06/2020

Superseded General Decision Number: RI20190001

State: Rhode Island

Construction Types: Building, Heavy (Heavy and Marine) and Highway

Counties: Rhode Island Statewide.

BUILDING CONSTRUCTION PROJECTS (does not include residential construction consisting of single family homes and apartments up to and including 4 stories) HEAVY, HIGHWAY AND MARINE CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of $10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate,if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/03/2020
1	01/24/2020
2	02/21/2020
3	03/06/2020

4	03/13/2020
5	05/01/2020
6	05/22/2020
7	06/05/2020
8	06/19/2020
9	07/24/2020
10	08/14/2020
11	10/02/2020
12	11/06/2020

ASBE0006-006 12/01/2019

	Rates	Fringes
HAZARDOUS MATERIAL HANDLER (Includes preparation, wetting, stripping, removal scrapping, vacuuming, bagging & disposing of all insulation materials, whether they contain asbestos or not, from mechanical systems)	$ 36.60	22.40

ASBE0006-008 09/01/2019

	Rates	Fringes
Asbestos Worker/Insulator Includes application of all insulating materials, protective coverings, coatings & finishes to all types of mechanical systems.	$ 43.60	29.90

BOIL0029-001 01/01/2017

	Rates	Fringes
BOILERMAKER	$ 42.42	24.92

BRRI0003-001 06/01/2020

	Rates	Fringes
Bricklayer, Stonemason, Pointer, Caulker & Cleaner	$ 42.55	28.02

BRRI0003-002 03/01/2020

	Rates	Fringes
Marble Setter, Terrazzo Worker & Tile Setter	$ 40.78	28.92

BRRI0003-003 03/01/2020

	Rates	Fringes
Marble, Tile & Terrazzo Finisher	$ 34.10	27.88

CARP0330-001 06/05/2020

	Rates	Fringes
CARPENTER (Includes Soft Floor Layer)	$ 39.13	28.60
Diver Tender	$ 40.13	28.60
DIVER	$ 50.73	28.60
Piledriver	$ 39.13	28.60
WELDER	$ 40.13	28.60

FOOTNOTES:

When not diving or tending the diver, the diver and diver tender shall receive the piledriver rate. Diver tenders shall receive $1.00 per hour above the pile driver rate when tending the diver.

Work on free-standing stacks, concrete silos & public utility electrical power houses, which are over 35 ft. in height when constructed: $.50 per hour additional.

Work on exterior concrete shear wall gang forms, 45 ft. or more above ground elevation or on setback: $.50 per hour additional.

The designated piledriver, known as the ""monkey"": $1.00 per hour additional.

CARP1121-002 01/06/2020

	Rates	Fringes
MILLWRIGHT	$ 39.07	29.15

ELEC0099-002 06/01/2020

	Rates	Fringes
ELECTRICIAN	$ 41.61	57.24%
Teledata System Installer	$ 31.21	13.10%+14.93

FOOTNOTES:

Work of a hazardous nature, or where the work height is 30 ft. or more from the floor, except when working OSHA-approved lifts: 20% per hour additional.

Work in tunnels below ground level in combined sewer outfall: 20% per hour additional.

ELEV0039-001 01/01/2020

	Rates	Fringes
ELEVATOR MECHANIC	$ 53.25	34.765+a+b

FOOTNOTES:

A. PAID HOLIDAYS: New Years Day; Memorial Day; Independence Day; Labor Day; Veterans' Day; Thanksgiving Day; the Friday after Thanksgiving Day; and Christmas Day.

B. Employer contributes 8% basic hourly rate for 5 years or more of service of 6% basic hourly rate for 6 months to 5 years of service as vacation pay credit.

ENGI0057-001 06/01/2020

	Rates	Fringes
Operating Engineer: (power plants, sewer treatment plants, pumping stations, tunnels, caissons, piers, docks, bridges, wind turbines, subterranean & other marine and heavy construction work)		
GROUP 1	$ 42.55	26.95+a

GROUP 2.....	$ 40.55	26.95+a
GROUP 3.....	$ 36.17	26.95+a
GROUP 4.....	$ 33.32	26.95+a
GROUP 5.....	$ 39.60	26.95+a
GROUP 6.....	$ 30.40	26.95+a
GROUP 7.....	$ 24.40	26.95+a
GROUP 8.....	$ 36.25	26.95+a
GROUP 9.....	$ 40.17	26.95+a

a. BOOM LENGTHS, INCLUDING JIBS:

150 feet and over + $ 2.00
180 feet and over + $ 3.00
210 feet and over + $ 4.00
240 feet and over + $ 5.00
270 feet and over + $ 7.00
300 feet and over + $ 8.00
350 feet and over + $ 9.00
400 feet and over + $10.00

a. PAID HOLIDAYS:
New Year's Day, President's Day, Memorial Day, July Fourth, Victory Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day, Christmas Day. a: Any employee who works 3 days in the week in which a holiday falls shall be paid for the holiday.

a. FOOTNOTES:
Hazmat work: $2.00 per hour additional.
Tunnel/Shaft work: $5.00 per hour additional.

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, lighters, boom trucks and derricks

GROUP 2: Digging machine, Ross Carrier, locomotive, hoist, elevator, bidwell-type machine, shot & water blasting machine, paver, spreader, graders, front end loader (3 yds. and over), vibratory hammer & vacuum truck, roadheaders, forklifts, economobile type equipment, tunnel boring machines, concrete pump and on site concrete plants.

GROUP 3: Oilers on cranes.

GROUP 4: Oiler on crawler backhoe.

GROUP 5: Bulldozer, bobcats, skid steer loader, tractor,

scraper, combination loader backhoe, roller, front end loader (less than 3 yds.), street and mobile-powered sweeper (3-yd. capacity), 8-ft. sweeper minimum 65 HP).

GROUP 6: Well-point installation crew.

GROUP 7: Utility Engineers and Signal Persons

GROUP 8: Heater, concrete mixer, stone crusher, welding machine, generator and light plant, gas and electric driven pump and air compressor.

GROUP 9: Boat & tug operator.

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* ENGI0057-002 11/01/2020

	Rates	Fringes
Power Equipment Operator (highway construction projects; water and sewerline projects which are incidental to highway construction projects; and bridge projects that do not span water)		
GROUP 1	$ 35.70	27.70+a
GROUP 2	$ 30.40	27.70+a
GROUP 3	$ 24.40	27.70+a
GROUP 4	$ 30.98	27.70+a
GROUP 5	$ 34.68	27.70+a
GROUP 6	$ 34.30	27.70+a
GROUP 7	$ 29.95	27.70+a
GROUP 8	$ 31.33	27.70+a
GROUP 9	$ 33.28	27.70+a

a. FOOTNOTE: a. Any employee who works three days in the week in which a holiday falls shall be paid for the holiday.

a. PAID HOLIDAYS: New Year's Day, President's Day, Memorial Day, July Fourth, Victory Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day & Christmas Day.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Digging machine, crane, piledriver, lighter, locomotive, derrick, hoist, boom truck, John Henry's, directional drilling machine, cold planer, reclaimer,

paver, spreader, grader, front end loader (3 yds. and over), vacuum truck, test boring machine operator, veemere saw, water blaster, hydro-demolition robot, forklift, economobile, Ross Carrier, concrete pump operator and boats

GROUP 2: Well point installation crew

GROUP 3: Utlity engineers and signal persons

GROUP 4: Oiler on cranes

GROUP 5: Combination loader backhoe, front end loader (less than 3 yds.), forklift, bulldozers & scrapers and boats

GROUP 6: Roller,skid steer loaders, street sweeper

GROUP 7: Gas and electric drive heater, concrete mixer, light plant, welding machine, pump & compressor

GROUP 8: Stone crusher

GROUP 9: Mechanic & welder

ENGI0057-003 06/01/2020

BUILDING CONSTRUCTION

	Rates	Fringes
Power Equipment Operator		
GROUP 1	$ 41.82	26.95+a
GROUP 2	$ 39.82	26.95+a
GROUP 3	$ 39.60	26.95+a
GROUP 4	$ 35.60	26.95+a
GROUP 5	$ 32.75	26.95+a
GROUP 6	$ 38.90	26.95+a
GROUP 7	$ 38.47	26.95+a
GROUP 8	$ 35.79	26.95+a

a.BOOM LENTHS, INCLUDING JIBS:

150 ft. and over: + $ 2.00
180 ft. and over: + $ 3.00
210 ft. and over: + $ 4.00
240 ft. and over: + $ 5.00
270 ft. and over: + $ 7.00
300 ft. and over: + $ 8.00

350 ft. and over: + $ 9.00
400 ft. and over: + $10.00

a. PAID HOLIDAYS: New Year's Day, President's Day, Memorial Day, July Fourth, Victory Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day & Christmas Day. a: Any employee who works 3 days in the week in which a holiday falls shall be paid for the holiday.

a. FOOTNOTE: Hazmat work: $2.00 per hour additional. Tunnel/Shaft work: $5.00 per hour additional.

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Cranes, lighters, boom trucks and derricks.

GROUP 2: Digging machine, Ross carrier, locomotive, hoist, elevator, bidwell-type machine, shot & water blasting machine, paver, spreader, front end loader (3 yds. and over), vibratory hammer and vacuum truck

GROUP 3: Telehandler equipment, forklift, concrete pump & on-site concrete plant

GROUP 4: Fireman & oiler on cranes

GROUP 5: Oiler on crawler backhoe

GROUP 6: Bulldozer,skid steer loaders,bobcats, tractor, grader, scraper,combination loader backhoe, roller, front end loader (less than 3 yds.), street and mobile powered sweeper (3 yds. capacity), 8-ft. sweeper (minimum 65 hp)

GROUP 7: Well point installation crew

GROUP 8: Heater, concrete mixer, stone crusher, welding machine, generator for light plant, gas and electric driven pump & air compressor

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IRON0037-001 09/16/2019

	Rates	Fringes
IRONWORKER.....	$ 36.27	28.98

LABO0271-001 06/02/2019

BUILDING CONSTRUCTION

	Rates	Fringes
LABORER		
GROUP 1	$ 31.80	25.05
GROUP 2	$ 32.05	25.05
GROUP 3	$ 32.55	25.05
GROUP 4	$ 32.80	25.05
GROUP 5	$ 33.80	25.05

LABORERS CLASSIFICATIONS

GROUP 1: Laborer, Carpenter Tender, Mason Tender, Cement Finisher Tender, Scaffold Erector, Wrecking Laborer, Asbestos Removal [Non-Mechanical Systems]

GROUP 2: Asphalt Raker, Adzemen, Pipe Trench Bracer, Demolition Burner, Chain Saw Operator, Fence & Guard Rail Erector, Setter of Metal Forms for Roadways, Mortar Mixer, Pipelayer, Riprap & Dry Stonewall Builder, Highway Stone Spreader, Pneumatic Tool Operator, Wagon Drill Operator, Tree Trimmer, Barco-Type Jumping Tamper, Mechanical Grinder Operator

GROUP 3: Pre-Cast Floor & Roof Plank Erectors

GROUP 4: Air Track Operator, Hydraulic & Similar Self-Powered Drill, Block Paver, Rammer, Curb Setter, Powderman & Blaster

GROUP 5: Toxic Waste Remover

LABO0271-002 06/02/2019

HEAVY AND HIGHWAY CONSTRUCTION

	Rates	Fringes
LABORER		
COMPRESSED AIR		
Group 1	$ 49.23	23.50
Group 2	$ 38.75	23.50
Group 3	$ 51.23	23.50
FREE AIR		
Group 1	$ 41.30	23.50
Group 2	$ 38.75	23.50

Group 3	$ 43.30	23.50
LABORER		
Group 1	$ 31.80	23.05
Group 2	$ 32.05	23.05
Group 3	$ 32.80	23.05
Group 4	$ 25.30	23.05
Group 5	$ 33.80	23.05
OPEN AIR CAISSON, UNDERPINNING WORK AND BORING CREW		
Bottom Man	$ 37.80	23.05
Top Man & Laborer	$ 36.85	23.05
TEST BORING		
Driller	$ 38.25	23.05
Laborer	$ 36.85	23.05

LABORER CLASSIFICATIONS

GROUP 1: Laborer; Carpenter tender; Cement finisher tender; Wrecking laborer; Asbestos removers [non-mechanical systems]; Plant laborer; Driller in quarries

GROUP 2: Adzeperson; Asphalt raker; Barcotype jumping tamper; Chain saw operators; Concrete and power buggy operator; Concrete saw operator; Demolition burner; Fence and guard rail erector; Highway stone spreader; Laser beam operator; Mechanical grinder operator; Mason tender; Mortar mixer; Pneumatic tool operator; Riprap and dry stonewall builder; Scaffold erector; Setter of metal forms for roadways; Wagon drill operator; Wood chipper operator; Pipelayer; Pipe trench bracer

GROUP 3: Air track drill operator; Hydraulic and similar powered drills; Brick paver; Block paver; Rammer and curb setter; Powderperson and blaster

GROUP 4: Flagger & signaler

GROUP 5: Toxic waste remover

LABORER - COMPRESSED AIR CLASSIFICATIONS

GROUP 1: Mucking machine operator, tunnel laborer, brake person, track person, miner, grout person, lock tender, gauge tender, miner: motor person & all others in compressed air

GROUP 2: Change house attendant, powder watchperson, top

person on iron

GROUP 3: Hazardous waste work within the ""HOT"" zone

LABORER - FREE AIR CLASSIFICATIONS

GROUP 1: Grout person - pumps, brake person, track person, form mover & stripper (wood & steel), shaft laborer, laborer topside, outside motorperson, miner, conveyor operator, miner welder, heading motorperson, erecting operator, mucking machine operator, nozzle person, rodperson, safety miner, shaft & tunnel, steel & rodperson, mole nipper, concrete worker, form erector (wood, steel and all accessories), cement finisher (this type of work only), top signal person, bottom person (when heading is 50' from shaft), burner, shield operator and TBM operator

GROUP 2: Change house attendant, powder watchperson

GROUP 3: Hazardous waste work within the ""HOT"" zone

PAIN0011-005 06/01/2020

	Rates	Fringes
PAINTER		
Brush and Roller	$ 35.62	22.55
Epoxy, Tanks, Towers, Swing Stage & Structural Steel	$ 37.62	22.55
Spray, Sand & Water Blasting	$ 38.62	22.55
Taper	$ 36.37	22.55
Wall Coverer	$ 36.12	22.55

PAIN0011-006 06/01/2020

	Rates	Fringes
GLAZIER	$ 39.18	22.55

FOOTNOTES:

SWING STAGE: $1.00 per hour additional.

PAID HOLIDAYS: Labor Day & Christmas Day.

PAIN0011-011 06/01/2020

	Rates	Fringes
Painter (Bridge Work).....	$ 52.25	22.55

PAIN0035-008 06/01/2011

	Rates	Fringes
Sign Painter.....	$ 24.79	13.72

PLAS0040-001 06/03/2019

BUILDING CONSTRUCTION

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	$ 36.00	27.15

FOOTNOTE: Cement Mason: Work on free swinging scaffolds under 3 planks width and which is 20 or more feet above ground and any offset structure: $.30 per hour additional.

PLAS0040-002 07/01/2019

HEAVY AND HIGHWAY CONSTRUCTION

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	$ 32.85	22.20

PLAS0040-003 07/01/2019

	Rates	Fringes
PLASTERER.....	$ 37.55	27.50

PLUM0051-002 08/31/2020

	Rates	Fringes
Plumbers and Pipefitters.....	$ 44.69	31.20

ROOF0033-004 06/01/2020

	Rates	Fringes
ROOFER	$ 39.15	27.31

SFRI0669-001 01/02/2020

	Rates	Fringes
SPRINKLER FITTER	$ 45.67	24.74

SHEE0017-002 07/01/2020

	Rates	Fringes
Sheet Metal Worker	$ 38.29	36.72

TEAM0251-001 05/01/2019

HEAVY AND HIGHWAY CONSTRUCTION

	Rates	Fringes
TRUCK DRIVER		
GROUP 1	$ 27.96	26.8525+A+B+C
GROUP 2	$ 27.61	26.8525+A+B+C
GROUP 3	$ 27.66	26.8525+A+B+C
GROUP 4	$ 27.71	26.8525+A+B+C
GROUP 5	$ 27.81	26.8525+A+B+C
GROUP 6	$ 28.21	26.8525+A+B+C
GROUP 7	$ 28.41	26.8525+A+B+C
GROUP 8	$ 27.91	26.8525+A+B+C
GROUP 9	$ 28.16	26.8525+A+B+C
GROUP 10	$ 27.96	26.8525+A+B+C

FOOTNOTES:

A. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day, plus Presidents' Day, Columbus Day, Veteran's Day & V-J Day, providing the employee has worked at least one day in the calendar week in which the holiday falls.

B. Employee who has been on the payroll for 1 year or more but less than 5 years and has worked 150 Days during the last year of employment shall receive 1 week's paid vacation; 5 to 10 years - 2 weeks' paid vacation; 10 or more years - 3 week's paid vacation.

C. Employees on the seniority list shall be paid a one hundred dollar ($100.00) bonus for every four hundred (400) hours worked, up to a maximum of five hundred dollars ($500.00)

All drivers working on a defined hazard material job site shall be paid a premium of $2.00 per hour over applicable rate.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Pick-up trucks, station wagons, & panel trucks

GROUP 2: Two-axle on low beds

GROUP 3: Two-axle dump truck

GROUP 4: Three-axle dump truck

GROUP 5: Four- and five-axle equipment

GROUP 6: Low-bed or boom trailer.

GROUP 7: Trailers when used on a double hook up (pulling 2 trailers)

GROUP 8: Special earth-moving equipment, under 35 tons

GROUP 9: Special earth-moving equipment, 35 tons or over

GROUP 10: Tractor trailer

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their

own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination

* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

ATTACHMENT

A

ATTACHMENT

B

Neutaconkanut Park Little League Field Improvements RE BID

899 Plainfield Street
PROVIDENCE , Rhode Island 02909
PROVIDENCE PARK DEPARTMENT

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SECTION 010000 - GENERAL REQUIREMENTS

PART 1 - GENERAL

1.1 All work done under this Contract shall also be in conformance with the Drawings and these Supplemental Technical Specifications.

A. SCOPE OF WORK

1. The general summary of work to be done under this contract consists of, but shall not be limited, to the following as shown in the Contract Documents:

B. WORK COVERED BY CONTRACT DOCUMENTS

C. The Contractor shall execute Neutaconkanut little League Field Renovation Re-Bid. The work includes, but is not necessarily limited to, the list of construction activities below..

1. Furnish and install Clay Infield mix
2. Furnish and Install new water meter service and enclosure box.
3. Furnish and install Loam for hydroseeding and sodding
4. Furnish and Install Baseball base plates
5. Scrape, Prime and Brush foul poles
6. F&I irrigation system
7. Earthwork and fine grading
8. Remove existing water meter assembly and partial meter pit deconstruction.

D. Work shall be as specifically indicated, shown or described in the Drawings, Technical Specifications, and other Contract Documents.

E. WORK UNDER ADD ALTERNATE

1. The following items of Work described will be addressed as an Add Alternate. All work incorporated with the items and any and all incidental to the items shall be accounted for.

F. PROJECT INFORMATION

1. OWNER
   a. City of Providence Parks Department Roger Williams Park Dalrymple Boathouse 1000 Elmwood Ave. Providence, RI 02905 Telephone: 401.680.7200 Superintendent of Parks: Wendy Nilsson
2. OWNER'S REPRESENTATIVE
   a. Edwin Sanchez

1.2 PROJECT LOCATION

A. 899 Plainfigld Steeet Providence RI, 02909

1.3 CONSULTING ENGINEER

A. N/A

PART 2 - PRODUCTS

2.1 CONTRACTOR USE OF PREMISES

A. The Contractor's use of premises shall be within the limits shown on the Drawings and as defined in the Standard Form of Agreement, for the performance of the Work.

1. The Contractor shall maintain vehicular access and utility service to the abutting properties at all times throughout the course of the construction.
2. The Contractor shall assume full responsibility for security of all materials and equipment on the site, including those of the subcontractors.
3. If directed by the Owner's Representative, the Contractor shall relocate or move any stored items that interfere with operations of the Owner.
4. The Contractor may elect to obtain (at no cost to the Owner) additional storage or work areas off-site if needed to perform the work.

2.2 OWNER OCCUPANCY REQUIREMENTS

A. The Owner (City) anticipates that Neutaconkanut Park inclusive of all on-site amenities beyond the Limit of Work will remain open throughout the course of construction.

B. Contractor shall provide the Owner's Representative with a written plan describing the sequences and durations anticipated for the execution of the Work.

2.3 MOBILIZATION, SITE PREPARATION, & DEMOLITION

A. THE WORK SPECIFIED IN THIS SECTION INCLUDES:

1. Mobilization of all personnel and equipment;
2. Preparing the construction site for construction operations;
3. Materials to be removed and salvaged at Parks Department off-site stockpile.
4. Materials to be removed and legally disposed of off site.
5. When applicable, verifying and utilizing survey control points as shown on the Drawings
6. Protecting existing site features to remain, such as fences, trees, shrubs and grassed areas outside the limit of work.
7. Protecting underground and overhead utilities and other existing facilities from damage.

8. Where applicable, provisions for site access and of traffic control.
9. At cessation of site improvement operations: Site clean-up
10. De-mobilization of all personnel and equipment.

2.4 CONSTRUCTION STAGING/STOCKPILE AREAS

A. Creating a Project staging or lay-down area is at the sole discretion of the Contractor.

B. Staging areas within the Park is permitted as shown on the Plans with the prior consent of and coordination with the Owner.

C. Restoration of the site to pre-existing condition shall be the sole responsibility of the Contractor.

2.5 MATERIALS AND EQUIPMENT:

A. Materials to be Removed and Stockpiled.

1. Materials directed to be removed and stockpiled shall be removed, transported to and stacked in a location directed by the Owner's Representative. All materials shall be neatly stacked as directed.
2. If the Owner's Representative determines that any part of the materials identified to be stockpiled are unsuitable for re use on the site or by the Owner elsewhere, such materials shall become the property of the Contractor and he shall legally dispose of them away from the site.

B. Signs: Conform to requirements of Temporary Facilities and Controls.

C. Temporary Site Protection: Temporary chain-link fence, if so desired shall be furnished, installed and maintained at no additional cost to the Owner. At the completion of all work at the site, the Contractor shall remove all temporary fencing and restore the site to its original or better condition at no additional cost to the Owner.

2.6 TEMPORARY CONSTRUCTION FACILITIES AND UTILITIES

A. Make arrangements for storage of materials and equipment in designated locations at the construction site. If staged on site, materials shall be secured from vandalism and or theft.

B. Plastic construction fence or snow fencing if installed shall be maintained in good condition. Provide barricades, barrels, fencing and/or other barriers around excavations and trenches as required for safety. Upon completion, temporary fencing shall be removed and the affected area restored to a condition equal to or better than existed prior to the start of the work.

2.7 SITE MAINTENANCE

A. Keep all surface irregularities of the construction site evenly graded to prevent the generation of impact noise, ground vibrations or sudden jarring sounds made by passing vehicles.

B. Control dust from Contractor operations in accordance with specified dust control measures.

C. Maintain the Site during construction in a manner that will not obstruct operations on neighborhood streets. Proceed with the work in an orderly manner, maintaining the construction site free of debris and unnecessary equipment or materials.

D. Legally dispose of all debris, rubbish, hazardous materials, oil, and grease in accordance.

E. Maintain safety and security of the construction site and any stockpiled or staged materials or equipment if left on site at all times.

2.8 TRAFFIC CONTROL

A. For all of his operations, the Contractor shall provide appropriate traffic control at the indicated Park access point in accordance with, TEMPORARY FACILITIES AND CONTROLS. The purposes of the traffic control are 1) to ensure that his operations in the project area are performed in a safe and orderly manner, and 2) to minimize the impact of truck and equipment traffic and noise on adjacent homes near the project area. The Contractor shall be responsible for obtaining any and all required permits and approvals, setting up and coordinating the local police department.

2.9 DEMOBILIZATION

A. Upon substantial completion of the work, Contractor shall remove all excess materials, equipment, construction debris, temporary facilities and construction measures (fencing, signs, barriers, etc.) from the project area, and shall leave the site in suitable condition for full occupancy and use by the Owner. The sedimentation and erosion controls installed as part of the Work may not necessarily be removed at this time (see below).

B. The Owner's Representative shall be the sole judge of whether the site has been suitably cleaned.

C. • Upon suitable stabilization of all disturbed "erodible" areas (e.g. acceptable level of grass growth in loamed and seeded areas, mulch applied and stable in planting areas, etc.), contractor shall remove and legally dispose of all sedimentation and erosion control measures (silt fence, hay bales, catch basin inserts, etc.).

PART 3 - EXECUTION (Not Used)

3.1 GENERAL REQUIREMENTS

A. The construction site entrance access point shall be as indicated on the plans via the existing 10' wide double leaf gate. The Owner will provide access to the existing locked gate. Any tracked debris from the site present on adjacent roadways shall be removed and the roads swept daily to remove any excess mud, dirt, or rock originating from the site. Trucks hauling material shall be covered and equipped with gates that prevent material from falling out. If present, catch basins within 100 feet of site entry and exit locations shall be protected with inlet sediment control devices and maintained for the duration of the work.

B. Identify, clearly mark and protect all survey monuments, temporary bench marks as well as any adjacent contractors' work and facilities (if applicable). Repair or replacement shall be at Contractor's sole expense if damaged by Contractor.

C. Protect existing culverts, sewers, and all other utilities including gas, telecommunications, electricity, and water. Repair or replace at Contractor's sole expense if damaged by Contractor.

D. Utilize or install drum or sawhorse barricades or backfill all open excavations, holes, trenches, and depressions occurring at construction sites or occurring as part of this work.

3.2 CHANGE ORDER PROCEDURE

A. DESCRIPTION

1. The Contractor shall comply with this procedure in the process of giving notification of change and preparing and submitting a proposal for adjustment due to a desired, perceived, or actual change in the work. Changes in the work, or period of performance of the work, may be directed in writing by the Owner or Landscape Architect or may be requested by the Contractor. In either case, payment for work accomplished under a modification may not be made until a formal contract modification, incorporating the change into the contract, has been issued and executed. Therefore, it is incumbent upon the Contractor to comply fully with this procedure and to expedite the resolution of changes.

3.3 CHANGE SUBMITTALS

A. When requested, the Contractor shall submit the following to the Owner or Landscape Architect in accordance with the Submittals procedures described in these specifications:

1. Proposal cover letter on Contractor's letterhead;
2. Detailed price proposal;
3. Drawings or other explanatory data; and
4. Time extension statement with justification if any time extension is requested.

3.4 COMPLIANCE

A. The Contractor shall take such measures as needed to assure familiarity and compliance by its staff with these procedures. If change proposals are incomplete, unclear, or ambiguous or are not supported by adequate documentation, the data will be returned and the Contractor shall resubmit or supplement the proposal as requested by the Owner's Representative. Delay resulting from the Contractor's noncompliance with this procedure shall not in itself constitute the basis for an extension in the time of performance under the contract.

3.5 PROCESSING CHANGES INITIATED BY THE OWNER'S REPRESENTATIVE

A. The Owner's Representative will initiate changes only in writing. The Owner will sign any Request for Proposal (RFP). This will establish a Proposed Change (PC) number, by which the change will be identified until such time as it may be incorporated into the contract by formal modification.

B. The Contractor may or may not be authorized to proceed with the changed work pending resolution of changes in the contract price or time of performance. If the work described in the RFP becomes critical to the timely performance of the Contractor's work, a written request for a Notice to Proceed must be forwarded to the Owner immediately. The Owner will issue any Notice to Proceed. This unilateral modification to the contract may be subject to further negotiation regarding price and time for completion.

C. Payment for changed work, covered by a unilateral modification, will not be made until a bilateral modification covering the changed work has been executed.

D. The Contractor shall prepare and submit its proposal for change to include at a minimum:

1. A cover letter referencing the PC number and citing the attachments, if any, which constitute the Contractor's total proposal.
2. A detailed price proposal showing labor, construction equipment, and material quantities and prices at the lowest practical level of each element of the work.
3. Any drawings, sketches, catalog cuts, samples, certifications, or other data required to be submitted by the Owner's Representative that is required to fully document
4. A statement of the proposed change in the time of completion of the contract, together with all required justification for such a change.
5. A statement to the effect that there is "no change in price and/or time of completion of the work under this contract as a result of this proposed change", if that is the case.

E. The Owner may accept the Contractor's proposal without negotiation. Alternatively, upon receipt of a proposal which is satisfactory in form, the Owner's Representative may require negotiation with the Contractor to arrive at a fair and equitable change in the contract price and time of completion. Upon agreement, a contract modification will be issued by the Owner for Contractor's execution.

3.6 PROCESSING CHANGES INITIATED BY THE CONTRACTOR

A. Should the Contractor feel that a change to the work under the contract, or to the contract itself, is necessary or desirable, it shall propose such a change to the Owner's Representative. This proposed change shall include a clear and concise description of the proposed change, along with that information cited in above.

B. Within a reasonable time, the Owner's Representative will review the Contractor's proposal and determine if the proposed change is in the Owner's best interest. If so, Contractor will be advised of this and a PC number will be assigned to Contractor's proposal.

3.7 EXECUTING CHANGED WORK

A. The Contractor is cautioned not to proceed with the work described in a proposed change until it is authorized to do so in writing by the Owner's Representative.

3.8 TERMINATIONS, DELAYS, AND LIQUIDATED DAMAGES

A. Termination of Contract: If the Contractor or any of his/her subcontractors refuses or fails to prosecute the work with such diligence as will insure its completion within the time specified in these Contract Documents, or as modified, as provided for in these Contract Drawings, or violates any other Provisions of this Contract, the Local Public Agency, by written notice to the Contractor, may terminate the Contractor's right to proceed with the Work. Upon such termination, the City of Providence may take over the work and prosecute the same to completion, by contract or otherwise, and the Contractor and his/her sureties shall be liable to the City of Providence for any additional cost incurred by the City of Providence in its completion of the work and they shall also be liable to the City of Providence for liquidated damages for any delay in the completion of the work as provided below. If the Contractor's right to proceed is so terminated, the Local Public Agency may take possession of and utilize in completing the work such materials, tools, equipment, and plant as may be on the site of the work and necessary therefore.

3.9 INSPECTION OF WORK

A. DESCRIPTION

1. Work included in this Section consists of periodic observation of construction of the project. The Contractor's work shall be monitored periodically by the Owner's Representative
2. Work included in this Section consists of periodic observation of construction of the project. The Contractor's work shall be monitored periodically by the Owner's Representative
3. The Owner's Representative presence on site or construction observation work is inspectional in nature and will not include supervision or direction of the actual work of the contractor.

4. In no event will the Owner's Representative be responsible or liable for the contractor's use or administration of personnel, machinery, staging, or other temporary or precautionary construction, safety precautions or procedures, or for compliance by the contractor with the provisions, terms, or specifications of the contract. Observation services provided by the Owner's Representative are solely for the benefit of the Owner.
5. The Contractor shall keep the Owner's Representative informed concerning the work status and projected work schedule through regular communications.
6. The Contractor shall not cover any work related to the required field visits until one of the following occurs:
   a. The Contractor is authorized by the Owner's Representative to proceed after the field visit.
   b. The field visit is re-scheduled by the Owner's Representative to a later construction event
   c. The field visit is waived in writing by the Owner's Representative
7. The Contractor shall submit a written request for a Final Inspection seven calendar days in advance of the planned completion date. After review of the Notice of Completion, the Owner's Representative may reject the Notice for cause or schedule the Final Inspection. The Owner's Representative will perform its Final Inspection on all phases of the work and develop a comprehensive punch list, which will be provided to the Contractor.
8. The Completion Verification Inspection will be scheduled when the punch list items discovered during the Final Inspection have been corrected. If discovered, the Owner's Representative may add new items to the punch list at this inspection.
9. The Contractor is advised that the Owner's Representative will not accept the work until the Owner's Representative determines Substantial Completion has been achieved. Therefore, to minimize its risk, the Contractor should schedule its work to be substantially complete in time to allow the Final Inspection, punch list work, and Completion Verification Inspection to occur in advance of the Contract Completion Date. Due to the construction time period and the anticipated weather conditions, substantially complete will be defined as the completion of construction for all item and the temporary stabilization of all disturbed areas, excluding planting and final seeding. Planting and final seeding is to occur during the time periods specified..
10. Nothing in this Section shall be construed to limit the Owner's Representative right to inspect the work at any time.

3.10 CONSTRUCTION SCHEDULES

A. DESCRIPTION

1. Work included in this Section consists of preparation, submittal, and updating of the project.

3.11 CONSTRUCTION SCHEDULE

A. Submit the following to the Owner's Representative in accordance with the Submittals Section. Submittals are for the record or approval as indicated.

1. The proposed construction schedule shall be submitted for approval within five (5) calendar days after receipt of Notice to Proceed.
2. Submit contract Weekly Summary Reports to the Owner's Representative for the record on a weekly basis
3. Submit construction progress schedule as backup to progress invoices.

B. The construction schedule shall show all work activities for completion of the work to be performed under this contract and will reflect Contractor's general sequential approach to the work. The construction schedule will be in an arrow diagram, precedence diagram, or bar chart format. The minimum level of detail (number of activities) shall include the activities described in the Schedule of Values and the Scope of the Work. The construction schedule shall demonstrate completion of all work within the period of performance of the contract in a reasonable and achievable manner.

3.12 PERIODIC SCHEDULE UPDATES

A. The Contractor shall support monthly payment requests with an approved construction schedule marked to indicate progress. Submit updated schedule as necessary.

B. When in the opinion of the Owner's Representative changes in the work occur that significantly affect the schedule, the Contractor shall submit a revised construction schedule for approval. The revised construction schedule shall be submitted within 10 calendar days after it is requested by the Owner's Representative The current approved construction schedule shall be used as a baseline for progress reporting.

3.13 SUBMITTAL PROCEDURES

A. DESCRIPTION

1. This Specification Section covers the preparation and submission of all work plans, drawings, samples, manufacturer's literature and brochures, installation instructions, and operation and maintenance manuals as specified herein and in the various sections of these Specifications.
2. A Submittal Schedule shall be submitted for approval within five (5) calendar days after receipt of Notice to Proceed.

3.14 DRAWINGS

A. The term "drawings" as used herein includes 'Shop Drawings' as required for fabrication, erection and installation, layout, and setting of proposed improvements; lists or schedules of materials and catalogues and brochures; performance and test data; and all other drawings and descriptive data pertaining to materials and methods of construction as may be required to show that the materials, equipment, or systems and the positions thereof conform to the requirements of the Contract Documents.

B. Where specified and if so directed by the Owner's Representative provide shop drawings that are accompanied by design computations.

C. Sheet sizes of drawings shall not exceed 24 in. by 36 in. The title block on all drawings shall bear the name of the Owner and the name of the project and shall include a space for the Owner's index number.

D. The Contractor's drawings shall be submitted electronically in PDF format to the Owner's Representative for review and approval.

E. The Contractor shall maintain a complete set of construction drawings at the jobsite, clearly marked to reflect as-built conditions. Upon completion of the work, the Contractor shall submit these Record Drawings to the Owner's Representative.

F. The Owner's Representative will review drawings and schedules only for conformance with the design of the Project and for compliance with the Contract Documents and Contract Drawings. The Contractor shall make any and all updates and corrections required by the Owner's Representative

G. Drawings shall be reviewed and returned within ten (10) working days of receipt of drawings at jobsite. Drawings and all supporting data, catalogs, or similar information shall be prepared by the Contractor or his suppliers and subcontractors but shall be submitted as instruments of the Contractor.

H. The Owner's Representative review of drawings will be of a general nature and shall not relieve the Contractor from responsibility for errors and omissions of any sort, for deviations from Drawings or Specifications, or for conflict with the work of others that may result from such deviations. The Owner's Representative review of drawings will not relieve the Contractor of responsibility to complete the work in accordance with the requirements of the Contract Documents.

I. After Notice of Award, the Contractor shall submit a Drawing Submittal Schedule to the Owner's Representative. The Contractor's drawing schedule shall be brought up to date from time to time to show the latest changes, omissions, and additions. The Schedule will be based on the Contractor's Construction Schedule and will show when the Contractor will submit the drawings and when he/she expects them to be returned so that construction activities shown on the Construction Schedule are not interrupted. There will be a minimum of three weeks between these two activities. Specific methods and routines for handling drawing reviews shall be established in advance within the general framework of the Contract Documents.

J. Work for which the Contractor's submittals are required shall not be started until the submittals have been reviewed and accepted in writing by the Owner or Landscape Architect. Any revision by the Contractor of a previously accepted submittal must be accepted in writing by the Owner's Representative before implementation.

3.15 SAMPLES

A. The Contractor shall, at his or her expense, furnish the Owner's Representative with samples of the various materials as specified in these Specification and Drawings. Samples shall be delivered to the office of the Owner's Representative at the Contractor's expense.

3.16 PRODUCT DATA

A. The Contractor shall submit to the Owner's Representative all required Material Safety Data Sheets (MSDS) and all Product Data Sheets and any other relevant product information for all items identified in the Technical Specifications and Drawings. All data shall be furnished by the Contractor in accordance with the approved schedule.

3.17 QUALITY CONTROL DESCRIPTION

A. This Section provides the requirements for Contract quality control (QC) pertaining to the Work, including:

1. QC of products and workmanship;
2. Manufacturer's instructions; and
3. Manufacturer's certificates and field services.

3.18 WORKMANSHIP

A. The Contractor shall comply with industry standards of the region, except when more restrictive tolerances or specified requirements indicate more rigid standards or more precise workmanship.

B. The Contractor shall provide suitably-qualified personnel to produce work of specified quality.

C. The Contractor shall secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, and racking.

D. The Contractor shall provide materials to match approved samples.

3.19 MANUFACTURER'S INSTRUCTIONS

A. The Contractor shall require compliance with instructions in full detail, including each step in sequence. Should instructions conflict with the Contract Documents, the Contractor shall request clarification from the Owner's Representative before proceeding.

3.20 MANUFACTURER'S CERTIFICATES

A. When required in individual Specifications sections, the Contractor shall submit manufacturer's certificates, in duplicate, certifying that products meet or exceed specified requirements.

3.21 TESTING LABORATORY SERVICES (NIC)

A. Not Utilized in this Contract

3.22 MANUFACTURER'S FIELD SERVICES

A. When required by the manufacturer or Owner's Representative, the Contractor shall have the manufacturer provide a qualified representative to observe field conditions, conditions of surfaces and installation, and quality of workmanship as applicable and to make written report of observations and recommendations to the Owner's Representative

3.23 AUTHORITY OF OWNER'S REPRESENTATIVE

A. The Owner's Representative will decide all questions that may arise as to the quality and acceptability of materials furnished. All questions that may arise as to the interpretation of the Contract Drawing and Specifications shall be determined by the Owner's Representative.

B. The Owner and Owner's Representative shall not be responsible for the Contractor's means, methods, techniques, sequences, or procedures of construction or the safety precautions and programs incident thereto, and the Owner's Representative will not be responsible for the Contractor's failure to perform the work in accordance with the Contract Documents.

C. The Owner's Representative will not be responsible for the acts or omissions of the Contractor or any subcontractors, of the agents or employees of any Contractor or subcontractor, or of any other persons at the site or otherwise performing any of the work.

3.24 COORDINATION OF DRAWINGS AND SPECIFICATIONS

A. The Contractor shall take no advantage of any apparent error or omission in the Contract Drawings or Specifications. In the event the Contractor discovers such a discrepancy, error or omission, he shall immediately notify the Owner's Representative. After review and consultation with the Owner's Representative the Owner's Representative will issue clarifications, provide interpretations and make such corrections as may be deemed necessary for the Contractor to proceed with fulfilling the intent of the Contract Drawings and Specifications.

B. When general reference is made on the Contract Drawings or within the Specifications to any cited Standard Specifications, it shall refer to the current edition of such Specifications or the latest revision thereof or interim Specifications adopted and in effect on the date of Effective Date of Agreement. In the event of a conflict between the Contract Drawings and the specifications, the Owner's Representative shall be notified to provide a clarification to the Contractor.

3.25 COOPERATION WITH UTILITIES

A. The Contractor will notify all utility companies, all pipeline owners, or other parties affected and endeavor to have all necessary adjustments of the public or private utility fixtures, pipelines, and other appurtenances within or adjacent to the limits of construction made as soon as practical.

B. Water lines, gas lines, wire lines, service connections, water and gas meter boxes, water and gas valve boxes, light standards, cableways, signals, and all other utility appurtenances within the limits of the proposed construction which are to be crossed, relocated or adjusted are to be moved by the Contractor or its designated agents, except as otherwise noted on the Contract Drawings. In the case of utility lines, the Contractor shall coordinate with the respective utilities for their removal and relocation.

C. Attention is directed to the possible existence of underground facilities not known to the Owner's Representative or in a location different from that which is shown on the Contract Drawings. The Contractor shall take steps to ascertain the exact location of all underground facilities prior to doing work that may damage such facilities or interfere with their service.

3.26 INDEPENDENT TESTING AND INSPECTION (NIC)

A. Not Applicable under this Contract

3.27 REQUIREMENTS

A. The requirements for sampling and testing or inspection are specified in the Specifications and Drawings. The Contractor shall maintain a complete and up-to-date file of all quality control documentation at the jobsite.

3.28 MATERIAL AND EQUIPMENT

A. DESCRIPTION

1. This Specification Section includes the requirements for the transportation, handling, storage, and protection of materials and equipment as specified herein and in the various Sections of these Specifications. This Section also addresses the procedure for Contractor-proposed product substitutions.

3.29 MANUFACTURER REQUIREMENTS

A. In general, the Contractor shall receive, handle, and store materials and equipment in accordance with manufacturer's recommendations and in a manner which will protect such items from damage or deterioration.

B. GENERAL

C. Products include the material, equipment, and systems used on this Project.Comply with the Specifications, Drawings and referenced standards as minimum requirements.

3.30 TRANSPORTATION AND HANDLING

A. The Contractor shall receive, handle, and store materials and equipment supplied by him/her in a manner that will protect such items from damage or deterioration in accordance with procedures provided by product manufacturers and the Owner.

B. Promptly inspect the shipments to assure that the products comply with requirements, the quantities are correct, and the products are undamaged.

3.31 STORAGE AND PROTECTION

A. Materials and equipment shall be stored off the ground on blocking or pallets and shall be covered for protection from vandalism and weather damage.

B. Materials and equipment shall be stored, tested, and cleaned prior to use, in accordance with the Specification and all specific manufacturers' requirements. Damaged or nonconforming items shall be removed immediately to a separated storage area for expeditious removal from site.

C. The Contractor shall provide a secure outside storage area in the vicinity of the site.

3.32 SUBSTITUTIONS

A. Substitutions will be considered only when a product becomes unavailable due to no fault of the Contractor or when deemed appropriate by the Owner's Representative

B. Document each request with complete data substantiating the compliance of the proposed substitution with the Contract Documents.

C. The requested substation proposed constitutes a representation that the Contractor:

1. Has investigated the proposed product and determined that it meets or exceeds, in all respects, the specified product.
2. Will provide the same warranty for substitution as for the specified product.
3. Will coordinate installation and make other changes which may be required for the Work to be complete in all respects.
4. Waives claims for additional costs which may subsequently become apparent.

D. Substitutions will be considered when they are indicated or implied on shop drawings or product data submittals without separate written request, or when acceptance will require substantial revision of the Contract Documents.

E. The Owner's Representative will determine acceptability of the proposed substitution, and will notify the Contractor of acceptance or rejection in writing within a reasonable time. Only one

request for the substitution will be considered for each product. When substitution is not accepted, the Contractor shall provide the specified product.

3.33 REJECTED MATERIALS AND DEFECTIVE WORK

A. Materials furnished by the Contractor and rejected by the Owner's Representative as unsuitable or not in conformity with the specifications shall forthwith be removed from the job-site and work area by the Contractor, and shall not be made use of elsewhere in the work.

B. Any errors, defects, or omissions in the execution of work or in the materials furnished by the Contractor, even though they may have been passed or overlooked or have appeared after the completion of the work, discovered at any time before the final payment is made hereunder, shall be forthwith rectified and made good by and at the expense of the Contractor and in a manner satisfactory to the Owner or Owner's Representative.

C. The Contractor shall reimburse the Owner for any expense, losses or damages incurred in consequence of any defect error, omission or act of the Contractor or his employees, as determined by the Owner's Representative, occurring previous to the final payment.

3.34 PROJECT CLOSEOUT

A. DESCRIPTION

1. This Section specifies administrative and procedural requirements for the project closeout including, but not limited to:
   a. Project record document (As-Built drawings) submittal. Maintain a clean, undamaged set of blue or black line white-prints of Contract Drawings and Shop Drawings. Mark the set to show the actual installation where the installation varies substantially from the Work as originally shown. Mark whichever drawing is most capable of showing conditions fully and accurately; where Shop Drawings are used, record a cross-reference at the corresponding location on the Contract Drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date.
   b. Organize record drawing sheets into manageable sets, bind with durable paper cover sheets, and print suitable titles, dates and other identification on the cover of each set. Upon completion of work, submit record drawings to the Owner's Representative.
2. Record Specifications
   a. Maintain one complete copy of the Project Manual, including addenda. Mark these documents to show substantial variations in actual Work performed in comparison with the Specifications and modifications. Give particular attention to substitutions, selection of options and similar information on elements that are concealed or cannot otherwise be readily discerned later by direct observation. Note related record drawing information and Product Data. Upon completion of the Work, submit record Specifications.
3. Test Results
   a. Not Applicable this project

4. REMOVAL OF PROTECTION
   a. Remove temporary protection and facilities installed for protection of the Work during construction. Fencing and erosion and sediment control measures and best management practices can be removed after permanent measures have been established.

3.35 WARRANTIES

A. DESCRIPTION

1. This Section specifies general administration and procedural requirements for warranties and bonds required by the Contract Documents, including manufacturers' standard warranties on products and special warranties.
   a. Refer to the General Conditions for terms of the Contractor's special warranty of workmanship and materials;
   b. General closeout requirements are included in Section "Project Closeout"; and
   c. Specific requirements for warranties for the Work and products and installations that are specified to be warranted are included in the specifications and Drawings.
2. Disclaimers and Limitations
   a. Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.

B. DEFINITIONS

1. Standard Warranties
   a. Standard product warranties are pre-printed written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the Owner.
2. Special Warranties
   a. Special warranties are written required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the Owner.

C. WARRANTY REQUIREMENTS

1. Related Damages and Losses
   a. When correcting warranted Work that has failed, remove and replace other Work that has been damaged as a result of such failure or that must be removed and replaced to provide access for corrections of warranted Work.
2. Reinstatement of Warranty
   a. When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
3. Replacement Cost
   a. Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of Contract

Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner's Representative has benefited from use of the Work through a portion of its anticipated useful service life.

4. Owner's Recourse
   a. Written warranties made to the Owner are in addition to implied warranties, and shall not limit the duties, obligations, rights and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights and remedies.
5. Rejection of Warranties
   a. The Owner's Representative reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents. The Owner's Representative reserves the right to refuse to accept Work for the Project where a special warranty, certification, or similar commitment is required on such Work or part of the Work, until evidence is presented that entities required to counter sign such commitments are willing to do so.
   b. All warranties shall be submitted to the Owner in accordance with conditions of the Contract and the Submittals.

D. WARRANTY PERIOD

1. All warranties required by the Contract documents shall commence on the date of Final Acceptance

END OF SECTION 010000

SECTION 015639 - TEMPORARY TREE AND PLANT PROTECTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Requirements, apply to this Section.

1.2 SUMMARY

A. Section includes general protection and pruning of existing trees and plants that are affected by execution of the Work, whether temporary or permanent construction.

1.3 DEFINITIONS

A. (DBH): Diameter breast height; diameter of a trunk as measured by the average of the smallest and largest diameters at a height 54 inches above the ground line for trees with caliper of 8 inches or greater as measured at a height of 12 inches above the ground.

B. Plant-Protection Zone: Area surrounding individual trees, shrubs, or other vegetation to be protected during construction and indicated on Drawings.

C. Tree-Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction and indicated on Drawings .

D. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

1.4 PRE- CNSTRUCTION MEETINGS

A. Pre-construction Conference: Conduct conference at Project site .

1. Review methods and procedures related to temporary tree and plant protection including, but not limited to, the following:
   a. Tree-service firm's personnel, and equipment needed to make progress and avoid delays.
   b. Arborist's responsibilities.
   c. Coordination of Work and equipment movement with the locations of protection zones.
   d. Trenching by hand or with air spade within protection zones.
   e. Field quality control and maintenance.
   f. Coordination by Parks Department City Forester and Forestry crews.

1.5 ACTION SUBMITTALS

A. Contractor shall arrange site visit with City Forester prior to mobilization to determine the scope of pruning by the Parks Department Forestry Division or Contractor as indicated on the drawings.

1.6 QUALITY ASSURANCE

A. Arborist Qualifications: Licensed arborist in jurisdiction where Project is located .

1.7 FIELD CONDITIONS

A. The following practices are prohibited within protection zones:

1. Storage of construction materials, debris, or excavated material.
2. Moving or parking vehicles or equipment.
3. Foot traffic.
4. Erection of sheds or structures.
5. Impoundment of water.
6. Excavation or other digging unless otherwise indicated.
7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.

B. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones and organic mulch.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Backfill Soil: Stockpiled soil mixed with planting soil of suitable moisture content and granular texture for placing around tree; free of stones, roots, plants, sod, clods, clay lumps, pockets of coarse sand, concrete slurry, concrete layers or chunks, cement, plaster, building debris, and other extraneous materials harmful to plant growth.

1. Mixture: Well-blended mix of two parts stockpiled soil to one part planting soil .

B. Protection-Zone Fencing: Fencing fixed in position and meetingthe following requirements

1. Plastic Protection-Zone Fencing: Plastic construction fencing constructed of high-density extruded and stretched polyethylene fabric with 2-inch maximum opening in pattern and weighing a minimum of 0.4 lb/ft.; remaining flexible from minus 60 to plus 200 deg F; inert to most chemicals and acids; minimum tensile yield strength of 2000 psi and ultimate tensile strength of 2680 psi; secured with plastic bands or galvanized-steel or stainless-steel wire ties; and supported by tubular or T-shape galvanized-steel posts spaced not more than 96 inches apart.

a. Height: 72 inches .
b. Color: High-visibility orange, nonfading.

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect tree root systems from damage caused by runoff or spillage of noxious materials while mixing, placing, or storing construction materials. Protect root systems from ponding, eroding, or excessive wetting caused by dewatering operations.

3.2 PROTECTION ZONES

A. Protection-Zone Fencing: Install protection-zone fencing along edges of protection zones before materials or equipment are brought on the site and construction operations begin in a manner that will prevent people from easily entering protected areas except by entrance gates. Construct fencing so as not to obstruct safe passage or visibility at vehicle intersections where fencing is located adjacent to pedestrian walkways or in close proximity to street intersections, drives, or other vehicular circulation.

B. Protection-Zone Signage: Install protection-zone signage in visibly prominent locations in a manner approved by Owner's Representative. Install one sign on protection-zone fencing. Sign to read "Tree Protection Zone - Do not Disturb". Sign to be printed on 24"x 36" white panel with black lettering at a mimimum of 3" height lettering .

C. Maintain protection zones free of trash.

D. Maintain protection-zone fencing in good condition as acceptable by Owner's Representative and remove when construction operations are complete and equipment has been removed from the site.

1. Do not remove protection-zone fencing, even temporarily, to allow deliveries or equipment access through the protection zone.
2. Temporary access is permitted subject to preapproval in writing by Owner's Representative if a root buffer effective against soil compaction is constructed as directed by Owner's Representative. Maintain root buffer so long as access is permitted.

3.3 EXCAVATION

A. General: Excavate at edge of protection zones and for trenches indicated within protection zones according to requirements in Section 312000 "Earth Moving" unless otherwise indicated.

B. Trenching within Protection Zones: Where utility trenches are required within protection zones, excavate under or around tree roots by hand or with air spade, or tunnel under the roots as directed by Owner's Representative. Do not cut main lateral tree roots or taproots larger than 2" without

direction from Owner's Representative; cut only smaller roots that interfere with installation of utilities. Cut roots as required for root pruning. If excavating by hand, use narrow-tine spading forks to comb soil and expose roots.

C. Redirect roots in backfill areas where possible. If encountering large, main lateral roots, expose roots beyond excavation limits as required to bend and redirect them without breaking. If encountered immediately adjacent to location of new construction and redirection is not practical, cut roots approximately 3 inches back from new construction and as required for root pruning.

D. Do not allow exposed roots to dry out before placing permanent backfill. Provide temporary earth cover and wrap with dampened burlap. Water and maintain in a moist condition. Temporarily support and protect roots from damage until they are permanently relocated and covered with soil or as directed by Owner's Representative.

3.4 ROOT PRUNING

A. Prune tree roots that are affected by temporary and permanent construction. Prune roots as follows:

1. Cut roots manually by digging a trench and cutting exposed roots with sharp pruning instruments; do not break, tear, chop, or slant the cuts. Do not use a backhoe or other equipment that rips, tears, or pulls roots.
2. No roots larger than two (2) inches in diameter may be cut without permission of the City Forester. Cuts must be made with hand-pruner , handsaws, or chainsaws.
3. Temporarily support and protect roots from damage until they are permanently redirected and covered with soil.
4. Cover exposed roots with burlap and water regularly.
5. Backfill as soon as possible according to requirements in Section 312000 "Earth Moving."

B. Root Pruning within Protection Zone: Clear and excavate by hand or with air spade to the depth of the required excavation to minimize damage to tree root systems. If excavating by hand, use narrow-tine spading forks to comb soil to expose roots. Cleanly cut roots as close to excavation as possible.

3.5 REGRADING

A. Lowering Grade: Where new finish grade is indicated below existing grade around trees, slope grade beyond the protection zone. Maintain existing grades within the protection zone.

B. Lowering Grade within Protection Zone: Where new finish grade is indicated below existing grade around trees, slope grade away from trees as recommended by Owner's Representative unless otherwise indicated.

1. Root Pruning: Prune tree roots exposed by lowering the grade. Do not cut main lateral roots or taproots; cut only smaller roots. Cut roots as required for root pruning.

C. Minor Fill within Protection Zone: Where existing grade is 2 inches or less below elevation of finish grade, fill with backfill soil. Place backfill soil in a single uncompacted layer and hand grade to required finish elevations.

3.6 REPAIR AND REPLACEMENT

A. General: Repair or replace trees, shrubs, and other vegetation indicated to remain or to be relocated that are damaged by construction operations, in a manner approved by Owner's Representative.

1. Submit details of proposed pruning and repairs.
2. Perform repairs of damaged trunks, branches, and roots within 24 hours according to arborist's written instructions.
3. Replace trees and other plants that cannot be repaired and restored to full-growth status, as determined by Owner's Representative. Replacement trees to be equal to the total diameter of mature tree by multiple equal diameter specimens.

B. Trees: Remove and replace trees tha damaged during construction operations that Owner's Representative determines are incapable of restoring to normal growth pattern.

1. Small Trees: Provide new trees of same size and species as those being replaced for each tree that measures 4" or smaller in caliper size.
2. Large Trees: Provide multiple trees of 2-1/2" - 3" caliper size to equal total diameter of tree being replaced. .
   a. Species: As determined by Owner's Representative.
3. Plant and maintain new trees as specified in Section 329300 "Plants."

C. Soil Aeration: Where directed by Owner's Representative, aerate surface soil compacted during construction. Aerate to loosen soil10 feet beyond drip line and no closer than 36" to tree trunk with air spade.

3.7 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Disposal: Remove excess excavated material, displaced trees, trash, and debris and legally dispose of them off Owner's property.

END OF SECTION 015639

SECTION 024119 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including Conditions, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Demolition and removal of selected site elements.

1.3 DEFINITIONS

A. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be salvaged or reinstalled.

B. Existing to Remain: Leave existing items that are not to be removed and that are not otherwise indicated to be salvaged or reinstalled.

C. Dismantle: To remove by disassembling or detaching an item from a surface, using gentle methods and equipment to prevent damage to the item and surfaces; disposing of items unless indicated to be salvaged or reinstalled.

1.4 MATERIALS OWNERSHIP

A. Unless otherwise indicated, demolition waste becomes property of Contractor.

B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.

1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

1.5 PREINSTALLATION MEETINGS

A. Predemolition Conference: Conduct conference at Project site .

1. Inspect and discuss condition of construction to be selectively demolished.

1.6 FIELD CONDITIONS

A. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.

1. Before selective demolition, Owner will remove the following items:
   a. surface mounted and freestanding trash receptacles. .

B. Notify Owner Representative of discrepancies between existing conditions and Drawings before proceeding with selective demolition.

C. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.

1. Hazardous materials will be removed by Owner before start of the Work.
2. If suspected hazardous materials are encountered, do not disturb; immediately notify Owner Representative. Hazardous materials will be removed by Owner under a separate contract.

D. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.

PART 2 - PRODUCTS

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that utilities have been disconnected and capped before starting selective demolition operations.

3.2 SELECTIVE DEMOLITION, GENERAL

A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:

1. Dispose of demolished items and materials promptly.

B. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

3.3 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

A. Concrete: Demolish in sections. Cut concrete full depth at junctures with construction to remain and at regular intervals using power-driven saw, and then remove concrete between saw cuts.

3.4 DISPOSAL OF DEMOLISHED MATERIALS

A. Remove demolition waste materials from Project site and dispose of them in an EPA-approved construction and demolition waste landfill acceptable to authorities having jurisdiction.

1. Do not allow demolished materials to accumulate on-site.
2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

B. Burning: Do not burn demolished materials.

END OF SECTION 024119

SECTION 107500 - FLAGPOLES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Ground-mounted flagpoles.
2. Flags.
3. Mounting accessories.

B. Related Requirements:

1. Section 033000 - Cast-in-Place Concrete: Concrete base and foundation construction.
2. Section 099000 - Painting and Coating: Field painting of flagpoles.
3. Section 260583 - Wiring Connections: Electrical connection of control operator.

1.2 REFERENCE STANDARDS

A. American Architectural Manufacturers Association:

1. AAMA 611 - Voluntary Specification for Anodized Aluminum.
2. AAMA 2604 - Voluntary Specification, Performance Requirements, and Test Procedures for High Performance Organic Coatings on Architectural Extrusions and Panels.

B. ASTM International:

1. ASTM A53/A53M - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.
2. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
3. ASTM A312/A312M - Standard Specification for Seamless and Welded Austenitic Stainless Steel Pipes.
4. ASTM B221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
5. ASTM B221M - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes (Metric).
6. ASTM B241/B241M - Standard Specification for Aluminum and Aluminum-Alloy Seamless Pipe and Seamless Extruded Tube.

1.3 SUBMITTALS

A. Section 013300 - Submittal Procedures: Requirements for submittals.

B. Product Data: Submit manufacturer information regarding pole, accessories, and configurations.

C. Shop Drawings: Indicate detailed dimensions, base attachment details, anchor requirements, imposed loads .

D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

E. Delegated Design Submittals: Submit signed and sealed Shop Drawings with design calculations and assumptions for flagpole foundation supports.

F. Manufacturer Instructions: Submit detailed instructions on installation requirements, including storage and handling procedures.

G. Qualifications Statements:

1. Submit qualifications for manufacturer, installer, and licensed professional.
2. Submit manufacturer's approval of installer.

1.4 QUALITY ASSURANCE

A. Perform Work according to standards.

B. Maintain hard copies of each standard affecting Work of this Section on Site.

1.5 QUALIFICATIONS

A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum three 3 years' documented experience.

B. Installer: Company specializing in performing Work of this Section with minimum three 3 years' documented experience .

C. Licensed Professional: Professional engineer 5 experienced in design of specified Work and licensed at Project location .

1.6 DELIVERY, STORAGE, AND HANDLING

A. Section 016000 - Product Requirements: Requirements for transporting, handling, storing, and protecting products.

B. Shipping: Spiral wrap flagpole with protective covering and pack in protective shipping tubes or containers.

C. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.

D. Store materials according to manufacturer instructions.

E. Protection:

1. Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.
2. Provide additional protection according to manufacturer instructions.

1.7 EXISTING CONDITIONS

A. Field Measurements:

1. Verify field measurements prior to fabrication.
2. Indicate field measurements on Shop Drawings.

1.8 WARRANTY

A. Section 017000 - Execution and Closeout Requirements: Requirements for warranties.

B. Furnish lifetime manufacturer's warranty for flagpole.

C. Furnish one 1 -year manufacturer's warranty for flagpole accessories and finish.

PART 2 - PRODUCTS

2.1 FLAGPOLES

A. Manufacturers:

1. American Flagpole.
2. Atlantic Fiberglass Products, Inc.
3. Elder flag Company
4. U.S. Flag & Flagpole Supply, LP.
5. Furnish materials according to standards.

B. Description:

1. Type: Ground Vertical-wall mounted.
2. Size:
   a. Outside Butt Diameter: 3" inches.
   b. Outside Tip Diameter: 1 7/8" inches.
   c. Nominal Wall Thickness: 1/8" inches.
   d. Nominal Height: 25' feet, measured from top of base .

C. Performance and Design Criteria:

1. Flagpole with Flag Flying:
   a. Maximum Wind Velocity: Resistant without permanent deformation to 54 mph.

2. Flagpole without Flag:
   a. Maximum Wind Velocity: Resistant without permanent deformation to 69 mph.

D. Material:

1. Aluminum:
   a. Comply with ASTM B241/B241M B221.
2. Glass Fiber:
   a. Composition: Reinforced polyester resin.
   b. Roving: Woven glass fiber.
   c. Minimum Axial Tensile Strength: 40,000 lb psi.

2.2 FINISHES

A. Aluminum: Mill finish.

B. Aluminum:

1. Anodized: Comply with AAMA 611, Class 1.
2. Color: TBD or As selected.

C. Aluminum:

1. PVDF: Comply with AAMA 2604.
2. Color: TBD or As selected.

D. Glass-Fiber Pole: Shop painted; color white .

E. Finial: Spun Gold anodized .

2.3 ACCESSORIES

A. Finial Ball :

1. Material: Aluminum .
2. Diameter: 3" inches.

B. Truck Assembly:

1. Type: Non-fouling.
2. Material Cast aluminum .
3. Bearings:
   a. Description: Stainless-steel ball bearings.
   b. Type: Revolving .

C. Flag:

1. Design: U.S.A. .

2. Size: 3 by 5 inches.
3. Fabric: Manufacturer's standard nylon .
4. Grommets: Brass .
5. Edges: Hemmed.

D. Cleats:

1. Material: Aluminum .
2. Size: 9 <_____> inches.
3. Fasteners:
   a. Material: Stainless steel.
   b. Furnish two for each halyard.

E. Cleat Box:

1. Material: Aluminum .
2. Furnish built-in hinge and hasp assembly.
3. Mounting: Attach to pole with tamperproof screws inside box.

F. Connecting Sleeve:

1. Description: Precision fit for field assembly of pole.
2. Material: Same material as flagpole .
3. Fasteners: Concealed.

G. Primer: Zinc-chromate type.

H. Foundation Tube Sleeve:

1. Corrugated 9-gauge steel, galvanized, and depth as indicated on Drawings.

I. Pole Base:

1. Description: Manufacturer's standard aluminum base with base cover.
2. Type: Sleeve .

J. Lighting: solar disc .

1. Double row LED solar flagpole top light.
2. minimum 4400 mHh Li-on battery
3. minimum 250 lumens
4. Accessories: flagpole stainless steel shaft extension for toppers

PART 3 - EXECUTION

3.1 EXAMINATION

A. Section 017000 - Execution and Closeout Requirements: Requirements for installation examination.

B. Verify that concrete foundation is ready to receive Work of this Section.

C. Verify that dimensions are as indicated on Shop Drawings by manufacturer.

3.2 PREPARATION

A. Coat metal sleeve surfaces below grade with asphaltic paint where in contact with cementitious surfaces, or where in contact with dissimilar metals.

3.3 INSTALLATION

A. Electrically ground flagpole installation.

B. Assemble flagpole components and accessories according to manufacturer instructions.

C. Flagpoles Set in Concrete Base: Install foundation plate and centering wedges and fasten.

D. Coordinate installation of conduit and boxes from disconnect to control unit and from control unit to motor-operating device.

3.4 TOLERANCES

A. Maximum Variation from Plumb: 1 <_____> inch.

END OF SECTION 107500

SECTION 312213 - ROUGH GRADING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Excavating topsoil.
2. Excavating subsoil.
3. Cutting, grading, filling, rough contouring, site for athletic fields .

1.2 UNIT PRICE - MEASUREMENT AND PAYMENT

A. Topsoil Fill Type S4 :

1. Basis of Measurement: By cubic yard .
2. Basis of Payment: Includes excavating existing soil, supplying soil materials, stockpiling, scarifying substrate surface, placing where required, and compacting.

B. Subsoil Fill Type S2 :

1. Basis of Measurement: By the cubic yard .
2. Basis of Payment: Includes excavating existing subsoil, stockpiling, scarifying substrate surface, placing where required, and compacting.

1.3 REFERENCES

A. American Association of State Highway and Transportation Officials:

1. AASHTO T180 - Standard Specification for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop.

B. ASTM International:

1. ASTM C136 - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
2. ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kN-m/m3).
3. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3).

1.4 QUALITY ASSURANCE

A. Perform Work in accordance with Municipality of standard.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Topsoil: Type as specified in Section 310513.

B. Subsoil Fill: Type as specified in Section 310513.

PART 3 - EXECUTION

3.1 PREPARATION

A. Call Local Utility Line Information service at 1-888-DIG-SAFE not less than three 3 working days before performing Work.

1. Request underground utilities to be located and marked within and surrounding construction areas.

B. Identify required lines, levels, contours, and datum.

C. Protect utilities indicated to remain from damage.

D. Protect plant life, lawns, and other features remaining as portion of final landscaping.

E. Protect bench marks, survey control point, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.

3.2 TOPSOIL EXCAVATION

A. Excavate topsoil from areas to be further excavated, relandscaped, or regraded, marked areas, without mixing with foreign materials for use in finish grading.

B. Do not excavate wet topsoil.

C. Stockpile in area designated on site to depth not exceeding 8 feet and protect from erosion. Stockpile material on impervious material , until disposal.

D. Remove excess topsoil not intended for reuse, from site.

3.3 SUBSOIL EXCAVATION

A. Excavate subsoil from areas to be further excavated, relandscaped, or regraded. marked areas.

B. Do not excavate wet subsoil or excavate and process wet material to obtain optimum moisture content.

C. When excavating through roots, perform Work by hand and cut roots with sharp axe.

D. Remove excess subsoil not intended for reuse, from site.

E. Stockpile subsoil in area designated on site to depth not exceeding 8 feet and protect from erosion.

F. Stockpile excavated material in area designated on site in accordance with Section 310513 .

G. Stability: Replace damaged or displaced subsoil as specified for fill.

3.4 FILLING

A. Fill areas to contours and elevations with unfrozen materials.

B. Place fill material in continuous layers and compact in accordance with schedule at end of this section.

C. Place material in continuous layers as follows:

1. Subsoil Fill: Maximum 8 inches compacted depth.

D. Maintain optimum moisture content of fill materials to attain required compaction density.

E. Make grade changes gradual. Blend slope into level areas.

F. Repair or replace items indicated to remain damaged by excavation or filling.

G. Install Work in accordance with Municipality of Public Work's standards.

3.5 TOLERANCES

A. Top Surface of Subgrade: Plus or minus 1/10 foot from required elevation.

3.6 SCHEDULES

A. Subsoil Fill:

1. Fill Type S2 : To subgrade elevation. 6" thick.
2. Compact uniformly to minimum 95% percent of maximum density.

B. Topsoil Fill:

1. Fill Type S4 : To subgrade elevation. 6" thick.
2. Compact uniformly to minimum 90% percent of maximum density.

END OF SECTION 312213

SECTION 312316.13 - TRENCHING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Backfilling and compaction.

1.2 UNIT PRICE - MEASUREMENT AND PAYMENT

A. Trenching:

1. Basis of Measurement: By cubic yard.
2. Basis of Payment: Includes excavating to required elevations, protecting excavation, and stockpiling excavated materials removing excavated materials from site. Over Excavating: Payment is not made for over excavated work nor for replacement materials.

B. Subsoil Fill:

1. Basis of Measurement: By cubic yard.
2. Basis of Payment: Includes furnishing fill material, stockpiling, scarifying substrate surface, placing where required, and compacting.

C. Granular Fill:

1. Basis of Measurement: By cubic yard.
2. Basis of Payment: Includes furnishing fill material, stockpiling, scarifying substrate surface, placing where required, and compacting.

1.3 REFERENCES

A. American Association of State Highway and Transportation Officials:

1. AASHTO T180 - Standard Specification for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop.

B. ASTM International:

1. ASTM D698 - Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kN-m/m3).
2. ASTM D1556 - Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method.

3. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN-m/m3).
4. ASTM D2167 - Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.
5. ASTM D2922 - Standard Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
6. ASTM D3017 - Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).

1.4 DEFINITIONS

A. Utility: Any buried pipe, duct, conduit, or cable.

1.5 QUALITY ASSURANCE

A. Perform Work in accordance with Municipality of Providence standard.

1.6 FIELD MEASUREMENTS

A. Verify field measurements prior to fabrication.

1.7 COORDINATION

A. Verify Work associated with lower elevation utilities is complete before placing higher elevation utilities.

PART 2 - PRODUCTS

2.1 FILL MATERIALS

A. Subsoil Fill: Type S2 as specified in Section 310513.

PART 3 - EXECUTION

3.1 LINES AND GRADES

A. Lay pipes to lines and grades indicated on Drawings.

1. Owner reserves right to make changes in lines, grades, and depths of utilities when changes are required for Project conditions.

B. Use laser-beam instrument with qualified operator to establish lines and grades.

C. Maintain grade alignment of pipe using string line parallel with grade line and vertically above centerline of pipe.

1. Establish string line on level batter boards at intervals of not more than 25 feet.
2. Set three adjacent batter boards before laying pipe to verify grades and line.
3. Determine elevation and position of string line from elevation and position of offset points or stakes located along pipe route.
4. Do not locate pipe using side lines for line or grade.

3.2 PREPARATION

A. Call Local Utility Line Information service at 888-DIG-SAFE not less than three working days before performing Work.

1. Request underground utilities to be located and marked within and surrounding construction areas.

B. Identify required lines, levels, contours, and datum locations.

C. Protect plant life, lawns, and other features remaining as portion of final landscaping.

D. Protect bench marks, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.

E. Maintain and protect above and below grade utilities indicated to remain.

F. Establish temporary traffic control when trenching is performed in public right-of-way.

3.3 TRENCHING

A. Excavate subsoil required for utilities to Water Meter

B. Do not advance open trench more than 200 feet ahead of installed pipe.

C. Cut trenches sufficiently wide to enable installation and allow inspection. Remove water or materials that interfere with Work.

D. Excavate bottom of trenches maximum 2 feet wider than outside diameter of pipe.

E. Excavate trenches to depth indicated on Drawings. Provide uniform and continuous bearing and support for bedding material and pipe .

F. Trim excavation. Hand trim for bell and spigot pipe joints. Remove loose matter.

G. Remove excess subsoil not intended for reuse, from site.

H. Remove subsoil from site.

I. Stockpile subsoil in area designated on site to depth not exceeding 8 feet and protect from erosion.

J. Stockpile excavated material in area designated on site in accordance with Section 310513 .

3.4 BACKFILLING

A. Backfill trenches to contours and elevations with unfrozen fill materials.

B. Systematically backfill to allow maximum time for natural settlement. Do not backfill over porous, wet, frozen, or spongy subgrade surfaces.

C. Place fill material in continuous layers and compact .

D. Maintain optimum moisture content of fill materials to attain required compaction density.

E. Do not leave more than 50 feet of trench open at end of working day.

F. Protect open trench to prevent danger to the public .

3.5 PROTECTION OF FINISHED WORK

A. Reshape and re-compact fills subjected to vehicular traffic during construction.

END OF SECTION 312316.13

SECTION 312500 - EROSION AND SEDIMENTATION CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

A. Furnish all labor, materials, equipment and incidentals required and perform all installation, maintenance, removal and area cleanup related to erosion and sedimentation control work required to meet Federal, State, and local permit requirements and as shown on the Drawings and as specified herein. The work shall include, but not necessarily be limited to; installation of temporary access ways and staging areas, compost filter socks, catch basin sediment filters (silt sack), sediment removal and disposal, device maintenance, removal of temporary devices, and final cleanup.

B. Related Sections:

1. Section 031000 - Concrete Forming and Accessories.
2. Section 032000 - Concrete Reinforcing.
3. Section 033000 - Cast-In-Place Concrete.
4. Section 311000 - Site Clearing.
5. Section 321313 - Concrete Paving.
6. Section 329119 - Landscape Grading.

1.2 REFERENCES

A. EPA document titled: "Stormwater Management for Construction Activities — Developing Pollution Prevention Plans and Best Management Practices" document number EPA 832-R-92-005, dated 1992, or most recent edition. State, County Conservation Districts or local Conservation Commission standards can be substituted for the EPA standard if the State, County or Local Conservation Commission standards is equal to, or more detailed than, the EPA standard.

B. State of Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction, Current Edition with latest addenda.

1.3 SUBMITTALS

A. Submit, in accordance with Division 01 10 00 – General Requirements: Submittal Procedures ten (10) days after award of Contract, technical product literature for all commercial products to be used for erosion and sedimentation control.

B. If a NPDES General Permit is required, Contractor shall, prior to the start of construction:

1. Prepare and submit the EPA NPDES Notice of Intent to Discharge to the applicable EPA office in accordance with EPA regulations. Submit one copy of the permit to Owner's Representative for informational purposes only.
2. Prepare and submit a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the U.S. Environmental Protection Agency (EPA) National Pollution Discharge Elimination System (NPDES) General Permit for this work. Submit one copy of the permit to Owner's Representative for informational purposes only.

C. Samples:

1. Submit two samples or rock, minimum 5 tons each or one half total project quantity, whichever is smaller. Provide one sample in place at construction site and provide other sample at quarry. Construction site sample may be incorporated into the Work. Samples will be used as reference for judging size, and graduation of rock supplied and placed.

1.4 QUALITY ASSURANCE

A. Be responsible for the timely installation and maintenance of all erosion and sedimentation control devices necessary to prevent the movement of sediment from the construction site to off-site areas or into the stream system via surface runoff or underground drainage systems. Measures in addition to those shown on the Drawings necessary to prevent the movement of sediment off site shall be installed, maintained, removed, and cleaned up at the expense of the Contractor. No additional charges to the Owner will be considered.

B. Where Contractor's efforts to control erosion and sediment have been demonstrated to be ineffective or potentially ineffective in the opinion of the Owner's Representative, the Owner's Representative may order that additional measures be implemented and constructed at no additional cost to the Owner.

C. Perform Work in accordance with requirements of Section 310513, Section 312213, Section 312500, Section 320513, Section 329113, Section 329119, Section 329200, and Section 329223.

D. Perform Work according to Municipality of Providence Public Works standards.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Catch Basin sediment control devises shall be sediment capture devices specifically designed for this purpose such as "Silt Sack" by Geo-Synthetics, LLC or approved equal.

B. When work is performed outside of normal seeding window straw mulch shall be utilized on all newly graded areas to protect areas against washouts and erosion. Straw mulch shall be comprised of threshed straw of oats, wheat, barley, or rye that is free from noxious weeds, mold or other objectionable material. The straw mulch shall contain at least 50 percent by weight of material to

be 10-in or longer. Straw shall be in an air-dry condition and suitable for placement with blower equipment.

C. Compost Filter Sock

1. Machine produced.
2. Straw filled tubes of compacted straw of rice, wheat or barley.
3. Compost filter sock to be certified as weed free.
4. Netting for tubes to be seamless, high density polyethylene with ultra violet inhibitors.
5. Roll length to be 10.0 feet to 25.0 feet.
6. Weight per linear foot, 12-inch: 2.5 lbs. minimum 9-inch: 1.5 lbs. minimum
7. Stakes shall be wooden, 1 1/8-inch x 1 1/8-inch x 2.5 feet long, with lower ends tapered to facilitate driving into compacted soil. Rebar may be substituted for wooden stakes

PART 3 - EXECUTION

3.1 INSTALLATION

A. Catch basin sediment control devices shall be installed according to manufacturer's recommendations and as directed by the Owner's Representative.

B. Staging areas and stabilized construction entrance shall be surfaced with a minimum depth of 6 inches of crushed stone (if so directed by the Owner's Representative). Stabilized construction entrances shall be installed as shown on the Plans.

3.2 MAINTENANCE AND INSPECTION

A. Inspections

1. Make a visual inspection of all erosion and sedimentation control devices once per week and promptly after every rainstorm. If such inspection reveals that additional measures are needed to prevent movement of sediment to offsite areas, promptly install additional devices as needed. Sediment controls in need of maintenance shall be repaired promptly.

B. Device Maintenance

1. Sediment Filters
   a. Catch basin sediment control devices shall be cleaned of sediment in a manner as recommended by the manufacturer and as directed by the Owner's Representative. Remove sediment from filter bag when saturated with sediment as directed by the Owner's Representative.

3.3 REMOVAL AND FINAL CLEANUP

A. Once the site has been permanently stabilized against erosion, remove all sediment control devices and sediment. Dispose sediment and all waste materials in a proper manner.

B. When sediment accumulation in sedimentation structures has reached a point one-third depth of sediment structure or device, remove and dispose of sediment.

C. Do not damage structure or device during cleaning operations.

D. Clean channels when depth of sediment reaches approximately one half channel depth.

E. Clean channels when depth of sediment reaches approximately one half channel depth.

END OF SECTION 312500

SECTION 321823.10 - INFIELD SKIN SURFACE

PART 1 - GENERAL

1.1 SUMMARY

A. This section includes the material and labor requirements for construction of a complete infield skin surface using the following material:

1. DuraEdge Classic Infield Mix

B. Related Sections:

1. Site Preparation
2. Earthwork

1.2 SUBMITTALS

A. Product Data: For the product specified, submit a 5-pound sample along with a private lab test result indicating the particle size analysis of the material specified. All tests shall be performed in accordance with ASTM F-1632.

B. Approved Testing Lab

1. Turf & Soil Diagnostics: 35 King Street, Trumansburg, NY 14886. (607) 387-5694

1.3 PROJECT/SITE CONDITIONS

A. All site work and earthwork shall be performed in accordance with the preceding sections. Sub-base material shall compact to 90 percent. If conditions do not warrant such compaction then an imported select granular fill shall be installed. Furthermore, the compacted sub-grade shall be installed in accordance with the final slope and shall mirror finish grade in order to ensure an even depth of material once placement has occurred.

B. Under no circumstances are perforated pipe under drains necessary or recommended for use under any infield skin material. Geotextile fabric is not recommended between the compacted sub-base and the infield skin material.

C. In certain instances, and where warranted, a survey of the sub-grade elevations shall occur prior to placement of the infield skin material.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: Installers of materials specified shall have, at minimum, five successful installations of similar projects and materials. Installers shall be in possession of and demonstrate knowledge of the use of laser guided finishing equipment.

B. Material: If quality control samples are specified, they shall be completed at a rate of one per 250 tons of material delivered to the jobsite. All tests shall be conducted by the lab specified in Section 1.2 (B). All testing will be compared to and be in accordance with the material specifications provided in Section 2.2.

PART 2 - MATERIALS

2.1 MANUFACTURER

A. DuraEdge Classic Infield Mix is produced in various locations throughout the United States of America by and at the direction of the following manufacturer:

1. DuraEdge Products, Inc. 149 South Broad Street, Grove City, PA 16127. Phone: (866) 867-0052, Fax: (724) 264-4174, Email: info@duraedge.com, Website: www.duraedge.com.

2.2 MATERIALS

A. DuraEdge Classic Infield Mix is an engineered soil product which is mechanically mixed offsite in a controlled environment using a pugmill-type mixer. This process ensures thorough mixing of the sand and clay components to exact specifications.

B. Performance Specification

1. Infield mix 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 1.5 tons per cubic yard when compacted 85% - 90% on a Standard Proctor Test (ASTM D 689-07). The material possesses the following particle size analysis:
   a. Total sand content shall be 70-75 percent.
   b. The combined amount of sand retained on the medium, coarse and very coarse sieves shall be greater than or equal to 50 percent.
   c. The combined amount of silt and clay shall be 25-30 percent.
   d. The ratio of silt divided by clay, otherwise known as the SCR, shall be 0.5 – 1.0.
   e. No particles greater than 3 millimeters.
   f. Equal to or less than 5 percent of particles shall be retained on the 2 millimeter.
2. Materials meeting this specification would be DuraEdge Classic Infield Mix as manufactured by DuraEdge Products, Inc., Grove City, PA, (866) 867-0052, or an approved equal.

C. Amendments

1. Certain amendments are approved for use with DuraEdge Classic Infield Mix and shall be installed at the architect's discretion in accordance with the manufacturer's recommendations. Contact the manufacturer for further instructions.

2.3 EXCESS MATERIALS

A. Provide the owners' authorized representative with a 10-ton stockpile of material for future use.

PART 3 - EXECUTION

3.1 SUB-BASE PREPARATION

A. Compact sub-base to 90% or greater. If that compaction cannot be achieved, a select granular fill must be imported and placed that will fulfill the compaction requirement.

B. The compacted sub-grade should mirror finish grade to ensure that and even depth of material has been placed.

3.2 PLACEMENT

A. Place the material in lifts of 2 to 3 inches and lightly compact until an optimum compaction between 85 and 90 percent is achieved on a standard proctor test (ASTM D 689-07). Scarify the surface to facilitate bonding of the next lift and repeat until finish grade elevation is achieved. Completing this process as described will minimize settling and improve the performance of the product. See diagram in 3.1.C.

B. Depth of the material shall be 4 inches for new construction when finished and compacted. Achieve 85% to 90% compaction based on a standard proctor test (ASTM D 689-07).

3.3 WATERING

A. In most cases, the material is delivered with optimum moisture and adding water is not necessary. If unable to achieve optimum compaction, a light application of water may be needed.

3.4 FINISH GRADING

A. For best results the material shall be finish graded with a laser device that allows accuracy to +/- 1/8 inch. A slope of 1/2 percent to 1 percent shall be placed on the infield surface in order to facilitate surface drainage.

3.5 INSPECTION

A. The finished surface of the infield shall be smooth and free from any visible dips, humps, bumps 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.

3.6 TOPDRESSING

A. Following successful inspection, topdressing shall be applied to the surface for optimum product performance. This topdressing is either expanded shale or calcined clay product and shall be added at a rate of 0.5 pounds per 1 square foot for maintenance, or 1 pound per 1 square foot for new construction.

B. Topdressing shall be 1/8 - 1/4" thick.

C. Product is either ProSlide Engineered Topdressing (expanded shale) or Turface Pro League Heritage Red Conditioner (calcined clay). Both products are available through DuraEdge Products, Inc., Grove City, PA, (866) 867-0052. Turface is also available through Profile Products LLC, 750 Lake Cook Rd, Suite 440, Buffalo Grove, Ill., (800) 207-6457.

END OF SECTION 321823.10

SECTION 323113 - CHAIN LINK FENCES AND GATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section Includes:

1. Chain-link fences.
2. Swing gates.

B. Related Requirements:

1. Section 033000 "Cast-in-Place Concrete" for cast-in-place concrete and post footings.

1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1. Inspect and discuss electrical roughing-in, equipment bases, and other preparatory work specified elsewhere.
2. Review coordination of interlocked equipment specified in this Section and elsewhere.
3. Review required testing, inspecting, and certifying procedures.

1.4 QUALITY ASSURANCE

A. Mockups: Build mockups to set quality standards for fabrication and installation.

1. Build mockup for typical chain-link fence and gate, including accessories.
2. Fence Contractor: Contractor having 5 years' experience installing similar project in accordance with ASTM F567.
3. Manufacturer: Company having manufacturing facilities in the United State with a minimum 5 years' experience specializing in manufacturing of chain link fence product.
4. Substitutions: Alternate chain link products may be acceptable by the Owner's Representative as equal if approved in writing ten days prior to bidding provided that the items submitted meet the specifications contained in this document.
5. Single Source: To ensure system integrity obtain the chain link system, framework, fabric, fittings, gates and accessories from a single source.

6. Tolerances: ASTM current specification and tolerances apply and supersede any conflicting tolerance.

1.5 FIELD CONDITIONS

A. Field Measurements: Verify layout information for chain-link fences and gates shown on Drawings in relation to property survey and existing structures. Verify dimensions by field measurements.

PART 2 - PRODUCTS

2.1 CHAIN-LINK FENCE FABRIC

A. General: Provide fabric in one-piece heights measured between top and bottom of outer edge of selvage knuckle or twist according to "CLFMI Product Manual" and requirements indicated below:

1. Fabric Height: As indicated on Drawings.
2. Steel Wire for Fabric: Wire core diameter 9 guage.
   a. Mesh Size: 2 inches.
   b. Polymer-Coated Fabric: ASTM F 668,
      1) Product: Master Halco Inc - Permafused Polymer Coating Fused and Adhered to Zinc- Coating Steel Wire per ASTM F 668 Class 2b or Approved Equal.
      2) Color: Black, according to ASTM F 934.
      3) Coat selvage ends of metallic-coated fabric before the weaving process with manufacturer's standard clear protective coating.
3. Selvage: Knuckled at both selvages.

2.2 FENCE FRAMEWORK

A. Posts and Rails: ASTM F 1043 for framework, including rails, braces, and line; terminal; and corner posts. Provide members with minimum dimensions and wall thickness according to ASTM F 1043 or ASTM F 1083 based on the following:

1. Fence Height: As indicated on Drawings.
2. Horizontal Framework Members: Intermediate top and bottom rails according to ASTM F 1043.[2]
3. **Steel Pipe Type 1**: ASTM F 1083 Group IA, ASTM F 1083 standard weight schedule 40 hot-dip galvanized pipe having a zinc coating of 1.8 oz/ft2on the outside surface and 1.8 oz/ft2 on the inside surface.
   a. Regular Grade: Minimum steel yield strength of 30,000 psi.
   b. Intermediate Strength Grade: Minimum steel yield strength 83,000 psi all size 6.625" and 8.8625" OD only.
   c. High Strength 83000 Grade: Minimum steel yield strength 83,000 psi all size up to and including 4.00" OD.

1) Pipe End and Corner Post: 2-7/8" O.D Polymer Standard Weight Pipe (0.203" wall thickness 5.79 lb/ft.) Type 1.
2) Pipe Line Post: 2-3/8" O.D Polymer Standard Weight Pipe (0.154" wall thickness, 3.65 lb/ft.) Type 1.
3) Top Rail: 1-5/8" O.D Polymer Standard Weight Pipe (0.140" wall thickness, 2.27 lb/ft.) Type 1.

4. **Steel pipe Type II:** Cold formed electric resistance welded steel pipe complying with ASTM F1043 Group IC having minimum steel yield strength of 50,000 psi (344 MPa). External protective coating F1043 Type B, 0.0 oz/ft2 minimum hot-dip zinc coating plus chromate conversion and clear polymer coating. Internal coating F1043 type D, 81% nominal zinc pigmented coating minimum 3 mils (0.0076 mm) thick or Type B minimum 0.9 oz/ft2 zinc.
5. Wind load caution: Fences containing windscreens or privacy slats, all fences greater than 12 ft. (3.7 m) in height and fences 8 feet (2.4 m) in height using 1 in. (25 mm) or smaller mesh require a wind load force analysis for post size and post spacing. A fence post wind load calculator is available at www.chainlinkinfo.orgwww.chainlinkinfo.org or www.wheatland.comwww.wheatland.com.
6. Brace Rails: ASTM F 1043.
7. Polymer coating over zinc coating.
   a. Product: Master Halco Inc - Permafused Polymer Coating Fused and Adhered to Zinc- Coating Steel Wire per ASTM F 668 Class 2b or Approved Equal.
   b. Color: Black, according to ASTM F 934.

2.3 TENSION WIRE

A. Polymer-Coated Steel Wire: 3 Mils Minimum, Over Hot-Dipped diameter, tension wire according to ASTM F 1664, Class 2b over zinc -coated steel wire.

1. Product: Master Halco Inc - Permafused Polymer Coating Fused and Adhered to Zinc-Coating Steel Wire per ASTM F 668 Class 2b or Approved Equal.
2. Color: Black, according to ASTM F 934.

2.4 SWING GATES

A. **Swing gates double leaf** 10' (ft.) opening by 5' (ft.) Fabricate chain link swing gates in accordance with ASTM F900. Gate frame to be of welded construction. Weld areas to be protected with zinc-rich paint per ASTM A780. The gate frame members are to be spaced no greater than 8' 0" (2.44 m) apart horizontally or vertically. Exterior members to be 1-5/8" O.D. pipe, interior members when required shall be 1- 5/8" OD pipe. Pipe to be Grade 1 ASTMF1083 per section 2.3 Chain link fabric to match specification of fence system. Fabric to be stretched tightly and secured to vertical outer frame members using tension bar and tension bands spaced 12" (304.8 mm) on center and tied to the horizontal and interior members 12" (304.8mm) on center using 9-gauge galvanized steel ties per section 2.06 A4.

B. **Swing gates Single leaf** 4' (ft.) opening by 5' (ft.) Fabricate chain link swing gates in accordance with ASTM F900. following description as noted section 2.5 A.

C. Hinges, hot dip galvanized pressed steel or malleable iron, structurally capable of supporting gate leaf and allow opening and closing without binding. Non-lift-off type hinge design shall permit gate to swing 180° (3.14rad)

D. Latch: Galvanized fulcrum type capable of retaining gate in closed position and have provision for pad lock. Latch shall permit operation from either side of gate.

E. Double gates: Provide galvanized drop rod with center gate stop pipe or receiver to secure inactive leaf in the closed position. Provide galvanized pressed steel locking latch, requiring one padlock for locking both gate leaves, accessible from either side.

F. Gate holdback: Provide galvanized gate hold back keeper for each gate leaf over 5' (1524 mm) wide. Gatekeeper shall consist of mechanical device for securing free end of gate when in full open position.

G. Gate posts: Grade 1 pipe ASTM F1083 per section 2.3, (2.875) OD

1. **Gate fabric height up to and including 6 ft. (1.2m)**
   a. Gate Leaf Width: up to 4 ft. (1.2 m) Outside Diameter: 2.375 in. (60.3 mm)
   b. Gate Leaf Width: over 4 ft. to 10 ft. (1.2 to 3.05 m) Outside Diameter: 2.875 in. (73.0 mm)
   c. Gate Leaf Width: over 10 ft. to 18 ft. (3.05 to 5.5 m) Outside Diameter: 4.000 in. (101.6 mm)
2. **Gate fabric height over 6 ft. to 12 ft. (1.2 to 2.4m)**
   a. Gate Leaf Width: up to 6 ft. (1.8 m) Outside Diameter: 2.875 in. (73.0 mm)
   b. Gate Leaf Width: over 6 ft. to 12 ft. (1.8 to 3.7 m) Outside Diameter: 4.000 in. (101.6 mm)
   c. Gate Leaf Width: over 12 ft. to 18 ft. (2.4 to 5.5 m) Outside Diameter: 6.625 in. (168.3 mm)
   d. Gate Leaf Width: over 18 ft. to 24 ft. (5.5 to 7.3 m) Outside Diameter: 8.625 in. (219.1 mm)

H. Pipe and Tubing:

1. Zinc-Coated Steel: ASTM F 1043 and ASTM F 1083; manufacturer's standard protective coating and finish Polymer Coating fused.
2. Gate Posts: Round tubular steel.
3. Gate Frames and Bracing: Round tubular steel.

I. Frame Corner Construction: assembled with corner fittings.

J. Hardware:

1. Heavy Duty BoxHinges: 180-degree inward swing.
2. Fulcrum Latch: Permitting operation from both sides of gate with provision for padlocking accessible from both sides of gate.
3. Padlock and Chain: Owner's Representative will provide padlock.

2.5 FITTINGS: Provide fittings according to ASTM F 626.

A. Post Caps: Provide for each post.

1. ASTM F626 galvanized pressed steel, weather tight closure cap for tubular posts. Provided one cap for each post. "C" shaped line post without top rail do not required post caps. When top rail is specified provided line post loop top to secure top rail.
2. Rail ends: Galvanized pressed steel per ASTM F626, for connection of rails to post using a brace band.
3. Top rail sleeves: 7" (178 mm) galvanized steel sleeve per ASTM F626.
4. Wire ties: 6 gauge aluminum tide no line posts and rails. Pre-formed hog ring ties to be 9 gauge (0.148") (3.76 mm) galvanized steel or aluminum for attachment of fabric to tension wire. Tie wire and hog rings per ASTM F626.
5. Brace and tension (stretcher bar) bands: ASTM F626 galvanized 12 gauge (0.105") (2.67mm) pressed steel by3/4" (19mm) formed to a minimum 300-degree profile curvature for post attachment. Secure bands using minimum 5/16" (7.94 mm) galvanized carriage bolt and nut.
6. Tension (stretcher) bars: Galvanized steel one-piece length equal to 2 inches (50 mm) less than full height of fabric with a minimum cross-section of 3/16" x 3/4" (4.76 mm x 19 mm) per ASTM F626. Provide tension(stretcher) bars where chain link fabric is secured to the terminal post.
7. Carriage bolts and nuts: Galvanized of commercial quality

B. Tie Wires, Clips, and Fasteners: According to ASTM F 626.

1. Standard Round Wire Ties: For attaching chain-link fabric to posts, rails, and frames, according to the following:
   a. Hot-Dip Galvanized Steel: 6 gauge aluminum tie wire; galvanized coating thickness matching coating thickness of chain-link fence fabric.
   b. Pre-formed hog ring ties to be 9 gauge (0.148") (3.76mm) galvanized steel or aluminum for attachment of fabric to tension wire.

C. Finish:

1. Metallic Coating for Pressed Steel: Not less than1.2 oz./sq. ft. of zinc.
   a. Polymer coating over zinc coating.

2.6 GROUT AND ANCHORING CEMENT (N/A)

A. Non-shrink, Nonmetallic Grout: Factory-packaged, non-staining, noncorrosive, nongaseous grout complying with ASTM C 1107/C 1107M. Provide grout, recommended in writing by manufacturer, for exterior applications.

B. Anchoring Cement: 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.

2.7 POST SETTING MATERIALS

A. Concrete: Minimum 28-day compressive strength of 3,000 psi (20 MPa).

2.8 ACCESSORIES:

A. Privacy Slats: Slats to be manufactured from a combination of color pigments, quality high density virgin polyethylene and ultraviolet inhibitors, having a 25-year limited warranty against either color fading or breakage of slats and locking-channel used under normal climactic extremes experienced In North America and Hawaii. Color: By Pexco or approve equal TBD by Owner's Representative. Select design TBD by Owner's Representative. (NIC)

B. Fence Guard: Poly-Cap fence guard protection (Yellow)

PART 3 - EXECUTION

3.1 EXAMINATION

A. Ensure property lines and legal boundaries of work are clearly established.

B. Survey of fence location to be provided by Providence Parks Department

C. Verify areas to receive fencing are completed to final grade.

3.2 PREPARATION

A. Stake locations of fence lines, gates, and terminal posts. Do not exceed intervals of 250 feet or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, and property monuments.

3.3 CHAIN-LINK FENCE INSTALLATION

A. Install chain link fence system in accordance with ASTM F567 and manufacturer's instructions.

B. Locate terminal post at each fence termination and change in horizontal or vertical direction of 30° or more.

C. Space line posts uniformly maximum 10' (3048 mm) on center

D. Concrete set posts: Excavate holes in firm, undisturbed or compacted soil. Holes shall have diameter 4 times greater than outside dimension of post, and depths approximately 6" (152 mm) deeper than post bottom. Excavate deeper as required for adequate support in soft and loose soils, and for posts with heavy lateral loads. Set post bottom 42" (1066.8mm) below surface when in firm, undisturbed soil. Place concrete around posts in a continuous pour. Trowel finish around post and slope to direct water away from posts. Drive Anchor set line posts: With protective cap,

drive post 42" (1066.8mm) into ground. Excavate a 6" (152mm) diameter by 6" (152.4 mm) deep section around post to accommodate the drive anchor shoe clamp. Drive the 2 diagonal drive anchor angle blades into the soil and securely tighten the angle blades to post via the shoe clamp, backfill hole.

E. Check each post for vertical and top alignment and maintain in position during placement and finishing operations.

F. Tension wire: Install tension wires so that it will be located 4" (101.6 m) up from bottom the fabric. If top rail is not specified, install the tension wire so that it will be located 4" (101.6 mm) down from the top of the fabric. Stretch and install tension wire before installing the chain link fabric and attach it to each post using wire ties.

G. Top rail: Install in lengths of 21' (6400 mm). Connect ends with sleeves forming a rigid connection, allow for expansion and contraction. as shown on detail.

H. Center Rails: Install mid rails between line posts and attach to post using rail end or line rail clamps. A center rail is required for fabric height 12' (3658 mm) and over. as shown on detail.

I. Bottom Rails: Install bottom rails between posts and attach to post using rail end or line rail clamps. as shown on detail.

3.4 GATE INSTALLATION

A. Swing gates: Installation of swing gates and gate posts shall be per ASTM F567. Direction of swing shall be inward or outward as directed by Owner's Representative. Gates shall be hung plumb in the closed position with minimal space from grade to bottom of gate leaf. Double gate drop bar receiver shall be set in a minimum concrete footing 6" (152 mm) diameter by 24" (610 mm) deep. Gate leaf holdbacks shall be installed on all double gates and all gate leaf greater than 5' (1524 mm) in width.

3.5 CHAIN LINK FABRIC INSTALLATION

A. Fabric: Install fabric on security side, pull fabric taut; thread the tension bar through fabric and attach to terminal posts with tension bands spaced maximum of 1" (381 mm) on center and attach so that fabric remains in tension after pulling force is released. Install fabric so that it is 2" (50 mm) +/- 1" (25 mm) above finish grade.

B. Secure fabric using wire ties to line posts at 15" (381 mm) on center and to rails and braces 24" (610 mm) on center, and to the tension wire using hog rings 24" (610 mm) on center. Tie wire shall be secured to the fabric by wrapping it two 360 degree turns around the chain link wire pickets. Cut off any excess wire and bend back so as not to protrude so as to avoid injury if a pedestrian may come in contact with the fence,

3.6 ACCESSORIES

A. Fence Guard: Poly-Cap fence guard protection (Yellow)

3.7 SITE CLEAN UP

A. Clean up area adjacent to fence line from debris and unused material created by fence installation.

B. Reference General Section 10000

END OF SECTION 323113

SECTION 328400 - PLANTING IRRIGATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. Section Includes:

1. Piping and Fittings.
2. Controller
3. Trenching
4. Valves
5. Heads and emitters
6. Sensor

B. Sprinklers.

C. Related Sections:

1. 1. Section 260503 - Equipment Wiring Connections: Power supply connections.
2. 2. Section 260519 - Low-Voltage Electrical Power Conductors and Cables.
3. 3. Section 312317 - Trenching: Excavating and backfilling for irrigation piping.
4. 4. Section 312323 - Fill: Backfilling utility structures.
5. 5. Section 329119 - Landscape Grading.
6. Section 220519 "Meters and Gages for Plumbing Piping" for water metering requirements.
7. Section 230923.14 "Flow Instruments" for water metering equipment.

1.3 DEFINITIONS

A. Circuit Piping: Downstream from control valves to sprinklers, specialties, and drain valves. Piping is under pressure during flow.

B. Drain Piping: Downstream from circuit-piping drain valves. Piping is not under pressure.

C. ET Controllers: EvapoTranspiration Controllers. Irrigation controllers which use some method of weather based adjustment of irrigation. These adjusting methods include use of historical monthly averages of ET; broadcasting of ET measurements; or use of on-site sensors to track ET.

D. Main Piping: Downstream from point of connection to water distribution piping to, and including, control valves. Piping is under water-distribution-system pressure.

E. Low Voltage: As defined in NFPA 70 for circuits and equipment operating at less than 50 V or for remote-control, signaling power-limited circuits.

1.4 PERFORMANCE REQUIREMENTS

A. Irrigation zone control shall be automatic operation with controller and automatic control manual operation with manual valves.

B. Location of Sprinklers and Specialties: Design location is approximate. Make minor adjustments necessary to avoid plantings and obstructions such as signs and light standards. Maintain 100 percent irrigation coverage of areas indicated.

C. Minimum Working Pressures: The following are minimum pressure requirements for piping, valves, and specialties unless otherwise indicated:

1. Irrigation Main Piping: 200 PSI.
2. Circuit Piping: 150 PSI.

1.5 ACTION SUBMITTALS

A. Product Data: For each type of product indicated. Include rated capacities, operating characteristics, and furnished specialties and accessories.

B. Wiring Diagrams: For power, signal, and control wiring.

1.6 INFORMATIONAL SUBMITTALS

A. Coordination Drawings: Irrigation systems, drawn to scale, on which components are shown and coordinated with each other, using input from Installers of the items involved. Also include adjustments necessary to avoid plantings and obstructions such as signs and light standards.

B. Zoning Chart: Show each irrigation zone and its control valve.

C. Controller Timing Schedule: Indicate timing settings for each automatic controller zone.

1.7 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For sprinklers controllers and automatic control valves to include in operation and maintenance manuals.

1.8 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Spray percent of amount installed for each type and size indicated, but no fewer than 5 units.
2. percent of amount installed for each type indicated, but no fewer than 5 units.
3. percent of amount installed for each type indicated, but no fewer than 5 units.

1.9 QUALITY ASSURANCE

A. Installer Qualifications: An employer of workers that include a Licensed Master Irrigator.

1.10 DELIVERY, STORAGE, AND HANDLING

A. Deliver piping with factory-applied end caps. Maintain end caps through shipping, storage, and handling to prevent -end damage and to prevent entrance of dirt, debris, and moisture.

B. Store plastic piping protected from direct sunlight. Support to prevent sagging and bending.

1.11 PROJECT CONDITIONS

A. Interruption of Existing Water Service: Do not interrupt water service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary water service according to requirements indicated:

1. Notify Construction Manager no fewer than two days in advance of proposed interruption of water service.
2. Do not proceed with interruption of water service without Owner's written permission.

PART 2 - PRODUCTS

2.1 PIPES, TUBES, AND FITTINGS

A. Comply with requirements in the piping schedule for applications of pipe, tube, and fitting materials, and for joining methods for specific services, service locations, and pipe sizes.

B. Soft Copper Tube: , water tube, annealed temper.

1. Copper Pressure Fittings: ASME B16.18, cast-copper-alloy or ASME B16.22, wrought-copper solder-joint fittings. Furnish wrought-copper fittings if indicated.
2. Bronze Flanges: ASME B16.24, Class 150, with solder-joint end.
3. Copper Unions: MSS SP-123, cast-copper-alloy, hexagonal-stock body, with ball-and-socket, metal-to-metal seating surfaces and solder-joint or threaded ends.

C. Hard Copper Tube: **ASTM B 88, Type M**, water tube, drawn temper.

1. Copper Pressure Fittings: ASME B16.18, cast-copper-alloy or ASME B16.22, wrought-copper solder-joint fittings. Furnish wrought-copper fittings if indicated.

2. Bronze Flanges: ASME B16.24, Class 150, with solder-joint end.
3. Copper Unions: MSS SP-123, cast-copper-alloy, hexagonal-stock body, with ball-and-socket, metal-to-metal seating surfaces and solder-joint or threaded ends.

D. PE Pipe with Controlled ID: ASTM F 771, PE 3408 compound; SIDR 15.

1. Insert Fittings for PE Pipe: ASTM D 2609, nylon or propylene plastic with barbed ends. Include bands or other fasteners.

E. PE Pipe with Controlled OD: ASTM F 771, PE 3408 compound, SDR 11.

1. PE Butt, Heat-Fusion Fittings: ASTM D 3261.
2. PE Socket-Type Fittings: ASTM D 2683.

F. PE Pressure Pipe: AWWA C906, with DR of 7.3, 9, or 9.3 and PE compound number required to give pressure rating not less than **160 psig** .

1. PE Socket-Type Fittings: ASTM D 2683.

G. PVC Pipe: ASTM D 1785, PVC 1120 compound, Schedule 40 .

1. PVC Socket Fittings: ASTM D 2466, Schedules 40 and 80.
2. PVC Threaded Fittings: ASTM D 2464, Schedule 80.
3. PVC Socket Unions: Construction similar to MSS SP-107, except both headpiece and tailpiece shall be PVC with socket ends.

H. PVC Pipe, Pressure Rated: ASTM D 2241, PVC 1120 compound, SDR 21 and SDR 26.

1. PVC Socket Fittings: ASTM D 2467, Schedule 80.
2. PVC Socket Unions: Construction similar to MSS SP-107, except both headpiece and tailpiece shall be PVC with socket or threaded ends.

2.2 PIPING JOINING MATERIALS

A. Pipe-Flange Gasket Materials: AWWA C110, rubber, flat face, **1/8 inch** thick unless otherwise indicated; full-face or ring type unless otherwise indicated.

B. Metal, Pipe-Flange Bolts and Nuts: ASME B18.2.1, carbon steel unless otherwise indicated.

C. Brazing Filler Metals: AWS A5.8/A5.8M, BCuP Series, copper-phosphorus alloys for general-duty brazing unless otherwise indicated.

D. Solder Filler Metals: ASTM B 32, lead-free alloys. Include water-flushable flux according to ASTM B 813.

E. Solvent Cements for Joining PVC Piping: ASTM D 2564. Include primer according to ASTM F 656.

F. Plastic, Pipe-Flange Gasket, Bolts, and Nuts: Type and material recommended by piping system manufacturer unless otherwise indicated.

2.3 AUTOMATIC CONTROL VALVES

A. Plastic, Automatic Control Valves:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following
   a. Hunter Industries Incorporated.
   b. Rain Bird Corporation.
   c. Or Approved Equal
2. Description: Molded-plastic body, normally closed, diaphragm type with manual-flow adjustment, and operated by 24-V ac solenoid.

2.4 SPRINKLERS

A. HUNTER I-25

B. General Requirements: Designed for uniform coverage over entire spray area indicated at available water pressure.

C. Plastic, Pop-up, Gear-Drive Rotary Sprinklers:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following
   a. Hunter Industries Incorporated.
   b. Or Approved Equal

D. Metal, Pop-up, Impact-Drive Rotary Sprinklers:

1. HUNTER I-25
2. Manufacturers: Subject to compliance with requirements, provide products by the following
   a. Rain Bird.
   b. Or Approved Equal

E. Plastic, Surface, Pop-up Spray Sprinklers:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following
   a. Hunter.
   b. Rain Bird.
   c. Or Approved Equal

F. Plastic, Pop-up Spray Sprinklers:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following
   a. Hunter Industries Incorporated.
   b. Rain Bird Corporation.
   c. Or Approved Equal

G. Plastic Shrub Sprinklers:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following
   a. Hunter Industries Incorporated.
   b. Rain Bird.
   c. Or Approved Equal

2.5 QUICK COUPLERS

A. Manufacturers: Subject to compliance with requirements, provide products by the following.

1. Rain Bird Corporation.
2. Or Approved Equal

B. Model 44LRC

1. Two Piece Quick Coupling Valve
2. The quick coupling valve shall be a two piece type capable of having a discharge rate of ___units with a pressure loss not to exceed ___ units.
3. The valve body shall be constructed of red brass. The cover shall be a durable, protective self-closing rubber cover. When so specified, the cover shall be a locking rubber cover (LRC).
4. The valve shall be opened and closed by a brass key of the same manufacturer having a ___" (MNPT) and ___" (FNPT) outlet. The valve throat shall have a key-way with detent positions for regulating water flow.

C. Description: Factory-fabricated, bronze or brass, two-piece assembly. Include coupler water-seal valve; removable upper body with spring-loaded or weighted, rubber-covered cap; hose swivel with ASME B1.20.7, 3/4-11.5NH threads for garden hose on outlet; and operating key.

1. Locking-Top Option: Vandal-resistant locking feature. Include one matching key(s).

2.6 CONTROLLERS

A. Manufacturers: Subject to compliance with requirements, provide products by the following

1. Rain Bird Corporation.
2. Or Approved Equal

B. ESP-LXME Controller

1. The ESP-LXME Controller shall be of a hybrid type that combines electro-mechanical and microelectronic circuitry capable of fully automatic or manual operation. The controller shall be housed in a wall-mountable, weather-resistant plastic cabinet with a key-locking cabinet door suitable for either indoor or outdoor installation. The controller shall have the ability to be programmed and operated in any one of six languages: English, Spanish, French, German, Italian, & Portuguese. The display shall show programming options and operating instructions in the chosen language without altering the programming or operation information.
2. The controller shall have a base station capacity of 8 or 12 stations as well as 3 expansion slots capable of receiving station modules of 4, 8, or 12 stations to create a controller capacity of up to 48 stations. All stations shall have the capability of independently obeying or ignoring the weather sensor as well as using or not using the master valve. Station timing shall be from 0 minutes to 12 hours. The controller shall have a Seasonal Adjustment by program which adjusts the station run time from 0 to 300% in 1% increments.The controller shall also have a Monthly Seasonal Adjustment of 0 to 300% by month. Station timing with Seasonal Adjustment shall be from 1 second to 16 hours.
3. The controller shall have 4 separate and independent programs which can have different start times, start day cycles, and station run times. Each program shall have up to 8 start times per day for a total of 32 possible start times per day. The 4 programs shall be allowed to overlap operation based on user-defined settings which control the number of simultaneous stations per program and total for the controller. The controller shall allow up to 5 valves to operate simultaneously per program and total for the control¬ler including the master valve/pump start circuit. The controller shall have an electronic, diagnostic circuit breaker that shall sense a station with an electrical overload or short circuit and shall bypass that station and continue to operate all other stations.
4. The controller shall have a 365-day calendar with Permanent Day Off feature that allows a day(s) of the week to be turned off on any user selected program day cycle. (Custom, Even, Odd, Odd31, & Cyclical). Days set to Permanent Day Off shall override the normal repeating schedule and not water on the specified day(s) of the week. The controller shall also have a Calendar Day Off feature allowing the user to select up to 5 dates up to 365-days in the future when the controller shall not start programs. The controller shall incorporate a Rain Delay feature allowing the user to set the number of days the controller should remain off before automatically returning to the auto mode.
5. The controller shall have Cycle+Soak water management software which is capable of operating each station for a maximum cycle time and a minimum soak time to reduce water run-off. The maximum cycle time shall not be extended by Seasonal Adjustment.
6. The controller shall incorporate a FloManager feature providing real-time flow, power, and station management. FloManager shall manage the number of stations operating at any point in time based on water source capacity, station flow rate, number of valves per station; user defined simultaneous stations per program and for the controller. The controller shall provide station priorities to determine the order in which stations shall operate. The controller shall ignore the station number and instead operate the highest priority stations first and the lower priority stations last.
7. The controller shall offer Water Windows for each program. This function sets the allowed start and stop time where watering is allowed. If the watering cannot be completed by the time the Water Window closes, the stations with remaining run time are paused and watering automatically resumes when the Water Window opens the next time.

8. The controller shall offer a Flow Smart Module option which adds flow sensing functionality. The Flow Smart Module sensor input shall accept a direct input from a flow sensor with no flow scaling device required.
9. Module features shall include a FloWatch Learn Flow Utility which learns the normal flow rate of each station. Each time the station runs FloWatch compares the current real-time flow rate to the learned rate and takes user defined actions if high flow, low flow, or no flow is detected. FloWatch shall automatically determine the location of the flow problem and isolate the problem by turning off the affected station or master valve. FloWatch shall be compatible with both normally closed and open master valves. A Manual Master Valve Water Windows shall be provided to coordinate daytime manual watering with the flow sensing. This Water Windows shall offer programmable days of the week and manual watering additional flow rate.
10. The controller shall have an alarm indicator light on the front panel visible through the outer door with the door closed and locked. The alarm light shall prompt the user to select the alarm softkey to review the alarm condition(s).
11. The controller shall be compatible with the IQ v2.0 Central Control System utilizing IQ-NCC Network Communication Cartridges. The IQ-NCC Cartridge shall provide communication with the IQ Central Computer and other controllers via a variety of communication options (Direct Connect Cable, Phone, GPRS/Cellular, Ethernet, WiFi, Radio, and IQNet Communication Cable). The IQ v2.0 Central Control System shall provide remote computer control of the controller providing automatic or manual program adjustments.
12. The controller shall offer an optional metal cabinet and pedestal.The controller shall be as manufactured by Rain Bird Corporation.

2.7 BOXES FOR AUTOMATIC CONTROL VALVES

A. Plastic Boxes:

1. Model: VB-STD-H
   a. Manufacturers: Subject to compliance with requirements, provide products by one of the following
      1) Rain Bird Industries.
      2) Or Approved Equal
   b. Description: Box and cover, with open bottom and openings for piping; designed for installing flush with grade.
      1) Size: As required for valves and service.
      2) Shape: Rectangular.
      3) Sidewall Material: PE, ABS, or FRP .
      4) Cover Material: PE, ABS, or FRP .
         a) Lettering: " IRRIGATION ."

B. Drainage Backfill: Cleaned gravel or crushed stone, graded from **3/4 inch** minimum to **3 inches** maximum.

PART 3 - EXECUTION

3.1 EARTHWORK

A. Excavating, trenching, and backfilling are specified in Section 312000 "Earth Moving."

B. Drain Pockets: Excavate to sizes indicated. Backfill with cleaned gravel or crushed stone, graded from **3/4 to 3 inches** , to **12 inches** below grade. Cover gravel or crushed stone with sheet of asphalt-saturated felt and backfill remainder with excavated material.

C. Provide minimum cover over top of underground piping according to the following:

1. Irrigation Main Piping: Minimum depth of 18 inches below finished grade, or not less than
2. Circuit Piping: **12 inches** .
3. Drain Piping: **12 inches** .
4. Sleeves: 18 inches

3.2 PREPARATION

A. Set stakes to identify locations of proposed irrigation system. Obtain Architect's approval before excavation.

3.3 PIPING INSTALLATION

A. Location and Arrangement: Drawings indicate location and arrangement of piping systems. Install piping as indicated unless deviations are approved on Coordination Drawings.

B. Install piping at minimum uniform slope of 0.5 percent down toward drain valves.

C. Install piping free of sags and bends.

D. Install groups of pipes parallel to each other, spaced to permit valve servicing.

E. Install fittings for changes in direction and branch connections.

F. Install unions adjacent to valves and to final connections to other components with **NPS 2** or smaller pipe connection.

G. Install flanges adjacent to valves and to final connections to other components with **NPS 2-1/2** or larger pipe connection.

H. Install underground thermoplastic piping according to ASTM D 2774.

I. Install expansion loops in control-valve boxes for plastic piping.

J. Lay piping on solid subbase, uniformly sloped without humps or depressions.

K. Install ductile-iron piping according to AWWA C600.

L. Install PVC piping in dry weather when temperature is above **40 deg F** . Allow joints to cure at least 24 hours at temperatures above **40 deg F** before testing.

M. Install water regulators with shutoff valve and strainer on inlet and pressure gage on outlet. Install shutoff valve on outlet. Install aboveground or in control-valve boxes.

N. Water Hammer Arresters: Install between connection to building main and circuit valves aboveground or in control-valve boxes.

O. Install piping in sleeves under parking lots, roadways, and sidewalks.

P. Install sleeves made of Schedule 40 PVC pipe and socket fittings, and solvent-cemented joints.

Q. Install transition fittings for plastic-to-metal pipe connections according to the following:

1. Underground Piping:
   a. **NPS 1-1/2** and Smaller: Plastic-to-metal transition fittings.
   b. **NPS 2** and Larger: AWWA transition couplings.
2. Aboveground Piping:
   a. **NPS 2** and Smaller: Plastic-to-metal transition fittings .
   b. **NPS 2** and Larger: Use dielectric flange kits with one plastic flange.

3.4 JOINT CONSTRUCTION

A. Ream ends of pipes and tubes and remove burrs. Bevel plain ends of steel pipe.

B. Remove scale, slag, dirt, and debris from inside and outside of pipe and fittings before assembly.

C. Threaded Joints: Thread pipe with tapered pipe threads according to ASME B1.20.1. Cut threads full and clean using sharp dies. Ream threaded pipe ends to remove burrs and restore full ID. Join pipe fittings and valves as follows:

1. Apply appropriate tape or thread compound to external pipe threads unless dry seal threading is specified.
2. Damaged Threads: Do not use pipe or pipe fittings with threads that are corroded or damaged. Do not use pipe sections that have cracked or open welds.

D. Copper-Tubing Brazed Joints: Construct joints according to CDA's "Copper Tube Handbook," using copper-phosphorus brazing filler metal.

E. Copper-Tubing Soldered Joints: Apply ASTM B 813 water-flushable flux to tube end unless otherwise indicated. Construct joints according to ASTM B 828 or CDA's "Copper Tube Handbook," using lead-free solder alloy (0.20 percent maximum lead content) complying with ASTM B 32.

F. PE Piping Fastener Joints: Join with insert fittings and bands or fasteners according to piping manufacturer's written instructions.

G. PE Piping Heat-Fusion Joints: Clean and dry joining surfaces by wiping with clean cloth or paper towels. Join according to ASTM D 2657.

1. Plain-End PE Pipe and Fittings: Use butt fusion.
2. Plain-End PE Pipe and Socket Fittings: Use socket fusion.

H. PVC Piping Solvent-Cemented Joints: Clean and dry joining surfaces. Join pipe and fittings according to the following:

1. Comply with ASTM F 402 for safe-handling practice of cleaners, primers, and solvent cements.
2. PVC Pressure Piping: Join schedule number, ASTM D 1785, PVC pipe and PVC socket fittings according to ASTM D 2672. Join other-than-schedule-number PVC pipe and socket fittings according to ASTM D 2855.
3. PVC Nonpressure Piping: Join according to ASTM D 2855.

3.5 VALVE INSTALLATION

A. Underground Curb Valves: Install in curb-valve casings with tops flush with grade.

B. Underground Iron Gate Valves, Resilient Seat: Comply with AWWA C600 and AWWA M44. Install in valve casing with top flush with grade.

1. Install valves and PVC pipe with restrained, gasketed joints.

C. Aboveground Valves: Install as components of connected piping system.

D. Pressure-Reducing Valves: Install in boxes for automatic control valves or aboveground between shutoff valves.

E. Throttling Valves: Install in underground piping in boxes for automatic control valves.

F. Drain Valves: Install in underground piping in boxes for automatic control valves.

3.6 SPRINKLER INSTALLATION

A. Install sprinklers after hydrostatic test is completed.

B. Install sprinklers at manufacturer's recommended heights.

C. Locate part-circle sprinklers to maintain a minimum distance of **4 inches** from walls and **2 inches** from other boundaries unless otherwise indicated.

3.7 AUTOMATIC IRRIGATION-CONTROL SYSTEM INSTALLATION

A. Equipment Mounting: Install interior controllers on wall.

1. Place and secure anchorage devices. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
2. Install anchor bolts to elevations required for proper attachment to supported equipment.

B. Equipment Mounting: Install exterior freestanding controllers on precast concrete bases.

1. Place and secure anchorage devices. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
2. Install anchor bolts to elevations required for proper attachment to supported equipment.

C. Install control cable in same trench as irrigation piping and at least **2 inches** below or beside piping. Provide conductors of size not smaller than recommended by controller manufacturer. Install cable in separate sleeve under paved areas.

3.8 CONNECTIONS

A. Comply with requirements for piping specified in Section 221113 "Facility Water Distribution Piping" for water supply from exterior water service piping, water meters, protective enclosures, and backflow preventers. Drawings indicate general arrangement of piping, fittings, and specialties.

B. Install piping adjacent to equipment, valves, and devices to allow service and maintenance.

C. Connect wiring between controllers and automatic control valves.

3.9 FIELD QUALITY CONTROL

A. Perform tests and inspections.

1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections, and to assist in testing.

B. Tests and Inspections:

1. Leak Test: After installation, charge system and test for leaks. Repair leaks and retest until no leaks exist.
2. Operational Test: After electrical circuitry has been energized, operate controllers and automatic control valves to confirm proper system operation.
3. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

C. Any irrigation product will be considered defective if it does not pass tests and inspections.

D. Prepare test and inspection reports.

3.10 STARTUP SERVICE and WINERIZATION

A. Perform startup service.

1. Complete installation and startup checks according to manufacturer's written instructions.
2. Verify that controllers are installed and connected according to the Contract Documents.
3. Verify that electrical wiring installation complies with manufacturer's submittal.

B. Perform winterization Service

1. Complete (1) system shut-down with training

3.11 ADJUSTING

A. Adjust settings of controllers.

B. Adjust automatic control valves to provide flow rate at rated operating pressure required for each sprinkler circuit.

C. Adjust sprinklers and devices, except those intended to be mounted aboveground, so they will be flush with, or not more than 1/4 inch above, finish grade.

3.12 CLEANING

A. Flush dirt and debris from piping before installing sprinklers and other devices.

3.13 DEMONSTRATION

A. Train Owner's maintenance personnel to adjust, operate, and maintain automatic control valves and controllers.

3.14 PIPING SCHEDULE

A. Install components having pressure rating equal to or greater than system operating pressure.

B. Piping in control-valve boxes and aboveground may be joined with flanges or unions instead of joints indicated.

C. Underground irrigation main piping, 3 inch to 2-1/2 inch, shall be the following:

1. Schedule 40, PVC Gasket Joint pipe and socket fittings

D. Circuit piping, 1 inch to 2 inch, shall be one of the following:

1. , PE, controlled ID pipe; insert fittings for PE pipe; and fastener joints.
2. , PE, controlled OD pipe; PE butt, heat-fusion, or PE socket-type fittings; and heat-fusion joints.
3. Schedule 40, PVC pipe and socket fittings; and solvent-cemented joints.
4. SDR 26, PVC, pressure-rated pipe; Schedule 40, PVC socket fittings; and solvent-cemented joints.

E. Underground Branches and Offsets at Sprinklers and Devices: Schedule 80, PVC pipe; threaded PVC fittings; and threaded joints.

1. Option: Plastic swing-joint assemblies, with offsets for flexible joints, manufactured for this application.

F. Risers to Aboveground Sprinklers and Specialties: hard copper tube, wrought-copper fittings, and soldered joints.

G. Risers to Aboveground Sprinklers and Specialties: Schedule 80, PVC pipe and socket fittings; and solvent-cemented joints.

H. Drain piping shall be one of the following:

1. SDR 21, 26, or 32.5, PVC, pressure-rated pipe; Schedule 40, PVC socket fittings; and solvent-cemented joints.

3.15 VALVE SCHEDULE

A. Underground, Shutoff-Duty Valves: Use the following:

1. **NPS 2** and Smaller: Curb valve, curb-valve casing, and shutoff rod.
2. **NPS 3** and Larger: Iron gate valve, resilient seated; iron gate valve casing; and operating wrench(es).

B. Drain Valves:

1. **NPS 1/2 and NPS 3/4** : Plastic ball valve.
2. **NPS 1 to NPS 2** : Plastic ball valve.

END OF SECTION 328400

SECTION 329219 - SEEDING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Fertilizing.
2. Seeding.
3. Hydroseeding.
4. Mulching.
5. Maintenance.

B. Related Sections:

1. Section 312213 - Rough Grading: Rough grading of site.
2. Section 312317 - Trenching: Rough grading over cut.
3. Section 328400 - Planting Irrigation.
4. Section 329113 - Soil Preparation
5. Section 329119 - Landscape Grading: Preparation of subsoil and placement of topsoil in preparation for the Work of this section.
6. Section 329223 - Sodding.
7. Section 329300 - Plants.

1.2 UNIT PRICE - MEASUREMENT AND PAYMENT

A. Grassed Areas:

1. Basis of Measurement: By square foot (SF)
2. Basis of Payment: Includes seeding, watering and maintenance to specified time limit minimum 60 days and/or 3mowings.

1.3 REFERENCES

A. ASTM International:

1. ASTM C602 - Standard Specification for Agricultural Liming Materials.

1.4 DEFINITIONS

A. Weeds: Include Dandelion, Jimsonweed, Quackgrass, Horsetail, Morning Glory, Rush Grass, Mustard, Lambsquarter, Chickweed, Cress, Crabgrass, Canadian Thistle, Nutgrass, Poison Oak,

Blackberry, Tansy Ragwort, Bermuda Grass, Johnson Grass, Poison Ivy, Nut Sedge, Nimble Will, Bindweed, Bent Grass, Wild Garlic, Perennial Sorrel, and Brome Grass.

B. Weeds: Vegetative species other than specified species to be established in given area.

1.5 SUBMITTALS

A. Product Data: Submit data for seed mix, fertilizer, mulch, hydroseed and other accessories.

B. Manufacturer's Certificate: Certify Products meet or exceed specified requirements .

1.6 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: Include maintenance instructions, cutting method and maximum grass height; types, application frequency, and recommended coverage of fertilizer; .

1.7 QUALITY ASSURANCE

A. Provide seed mixture in containers showing percentage of seed mix, germination percentage, inert matter percentage, weed percentage, year of production, net weight, date of packaging, and location of packaging.

B. Perform Work according to Municipality of **Providence Parks** standards.

C. Maintain one copy of each document on site.

1.8 QUALIFICATIONS

A. Seed Supplier: Company specializing in manufacturing Products specified in this section with minimum three 3 years documented experience.

B. Installer: Company specializing in performing work of this section with minimum 5 years documented experience .

1.9 DELIVERY, STORAGE, AND HANDLING

A. Deliver grass seed mixture in sealed containers. Seed in damaged packaging is not acceptable.

B. Deliver fertilizer in waterproof bags showing weight, chemical analysis, and name of manufacturer.

1.10 MAINTENANCE SERVICE

A. Maintain seeded areas for two (2) months from Date of Substantial Completion.

B. Maintain seeded areas immediately after placement until grass is well established and exhibits vigorous growing condition for three 3mowing.

PART 2 - PRODUCTS

2.1 SEED MIXTURE

A. Description: Sport Field Mix for Irrigated Lawn

1. Improved Kentucky Blue Grass: 40% percent.
2. Chewing Fescue: 25% percent.
3. 3way Perennial Rye: 30% percent
4. Micro Clover: 5% percent

B. Description: Sport Field Mix for Non Irrigated Lawn

1. Improved Kentucky Blue Grass: 30% percent.
2. Turf Type Tall Fescue: 35% percent.
3. 3way Perennial Rye: 30% percent.
4. Micro Clover: 5% percent.

C. Description: Open Space Park Mix- Full Sun for Non Irrigated Lawn

1. Improved Kentucky Blue Grass: 10% percent.
2. Turf Type Tall Fescue: 25% percent.
3. 3way Perennial Rye: 30% percent.
4. Chewings Fescue Grass: 15% percent.
5. Creeping Red Fescue: 15% percent.
6. Micro Clover: 5% percent.

D. Description: Open Space Park Mix - Shade for Non Irrigated Lawn

1. 3way Perennial Rye: 20% percent
2. Turf Type Tall Fescue: 25% percent
3. Hard Fescue: 20% percent
4. Chewing Fescue: 15% percent
5. Creeping Red Fescue: 15% percent
6. Micro Clover: 5% percent

E. Stormwater Bio-Retention Basin Grass mix for Full Sun

1. Virginia Wild Rye: 22% percent
2. Alkaligrass: 16% percent
3. Fox Sedge: 15% percent
4. Deer Tongue: 12% percent
5. Switch Grass: 10% percent
6. Fowl Blue Grass: 10% percent

F. Suppliers:

1. Allen's Seed. 693 South County Trail Exeter, RI 02822 (401) 294-2722 or approved equal.

G. Furnish materials according to Municipality of Providence Parks standards.

2.2 ACCESSORIES

A. Water: Clean, fresh and free of substances or matter capable of inhibiting vigorous growth of grass.

B. Erosion Fabric: Jute matting, open weave.

C. Stakes: Softwood lumber, chisel pointed.

D. String: Inorganic fiber.

E. Fence: 4 foot construction plastic fence.

2.3 SOURCE QUALITY CONTROL

A. Provide recommendation for fertilizer and lime application rates for specified seed mix as result of testing.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify prepared soil base is ready to receive the Work of this section.

3.2 FERTILIZING

A. Apply Dolomitic or Calcitic Pelletized limestone at application rate of 5lb per 1000 sq.ft. Work lime into top 6 inches of soil or as directed by owner's representative.

B. Apply 19-19-19 use a starter fertilizer for Spring and Fall application rate of 5 lb per 1,000 sq.ft. or as directed by owner's representative..

C. Apply after smooth raking of topsoil .

D. Do not apply fertilizer at same time or with same machine used to apply seed.

E. Mix fertilizer thoroughly into upper 2 inches of topsoil.

F. Lightly water soil to aid dissipation of fertilizer. Irrigate top level of soil uniformly.

3.3 SEEDING

A. Apply seed at rate of 5.2 lbs per 1000 sq ft evenly in two intersecting directions. Rake in lightly.

B. Do not seed areas in excess of that which can be mulched on same day.

C. Seeding Season:

1. Spring Seeding: April 1 - May 15 or as directed by Owner's Rep
2. Fall Seeding: Aug 30 - November 1 or as directed by Owner's Rep

D. Do not sow immediately following rain, when ground is too dry, or when winds are over 12 mph.

E. Roll seeded area with roller not exceeding 300 lbs/linear foot (.)

F. Apply water with fine spray immediately after each area has been mulched. Saturate to 4 inches of soil.

3.4 HYDROSEEDING

A. Apply fertilizer, premium paper hydro mulch, seeded slurry and applegate protack tackifier #3 with hydraulic seeder at rate of 35lbs per 1000 sq.ft. evenly in one pass.

B. After application, apply water with fine spray immediately after each area has been hydroseeded. Saturate to 4 inches of soil and maintain moisture levels two to four inches.

3.5 SEED PROTECTION

A. Identify seeded areas with metal safety post and orange construction fence around area periphery. Set fence height to minimum 48 inches . Space stakes at minimum 72 inches .

B. Cover seeded slopes where grade is 5 inches per foot or greater with erosion fabric. Roll fabric onto slopes without stretching or pulling.

C. Lay fabric smoothly on surface, bury top end of each section in 6 inch deep excavated topsoil trench. Overlap edges and ends of adjacent rolls minimum 12 inches. Backfill trench and rake smooth, level with adjacent soil.

D. Secure outside edges and overlaps at 36 inch intervals with stakes.

E. Lightly dress slopes with topsoil to ensure close contact between fabric and soil.

F. At sides of ditches, lay fabric laps in direction of water flow. Lap ends and edges minimum 6 inches.

3.6 MAINTENANCE

A. Turf Maintenance Service: Provide full maintenance by skilled employees of landscape Installer. Maintain as required in "Turf Maintenance" Article. Begin maintenance immediately after each area in planted and continue until acceptable turf is established, but for not less than the following periods:

1. Seeded Turf: [60] days from date of [Planting Completion] or [Substantial Completion].
   a. When initial maintenance period has not elapsed before end of planting season, or if turf is not fully established, continue maintenance during next planting season.

B. Mow grass at regular intervals to maintain at maximum height of 2-1/2 inches. Do not cut more than 1/3 of grass blade at each mowing. Perform first mowing when seedlings are 40 percent higher than desired height.

C. Neatly trim edges and hand clip where necessary.

D. Water to prevent grass and soil from drying out.

E. Roll surface to remove minor depressions or irregularities.

F. Immediately reseed areas showing bare spots.

G. Repair washouts or gullies.

H. Protect seeded areas with warning signs during maintenance period. Install minimum 2 temporary signs or as directed by Owner's Rep. Temporary Signs to be provided by Owner.

END OF SECTION 329219

SECTION 329223 - SODDING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Preparation of subsoil.
2. Placement of topsoil.
3. Fertilization.
4. Sod installation.
5. Maintenance.

B. Related Requirements:

1. Section 312316.13 - Trenching: Rough grading over cut.
2. Section 312323 - Fill: Rough grading of Site.
3. Section 320513 - Soils for Exterior Improvements: Topsoil material.
4. Section 328400 - Planting Irrigation: Piped underground irrigation systems.
5. Section 329119 - Landscape Grading: Preparation of subsoil and placement of topsoil in preparation for Work of this Section.
6. Section 329219 - Seeding: Seeding and soil supplements.

1.2 DEFINITIONS

A. Weeds: Dandelion, Jimsonweed, Quackgrass, Horsetail, Morning Glory, Rush Grass, Mustard, Lambsquarter, Chickweed, Cress, Crabgrass, Canadian Thistle, Nutgrass, Poison Oak, Blackberry, Tansy Ragwort, Bermuda Grass, Johnson Grass, Poison Ivy, Nut Sedge, Nimble Will, Bindweed, Bent Grass, Wild Garlic, Perennial Sorrel, and Brome Grass.

B. Weeds: Vegetative species other than specified species to be established in given area.

1.3 UNIT PRICE - MEASUREMENT AND PAYMENT

A. Sodded Areas:

1. Basis of Measurement: By square foot (SF).
2. Basis of Payment:
   a. Includes preparation of subsoil , preparation of topsoil , and placement of topsoil.
   b. Includes sodding and watering.
   c. Includes maintenance based on specified time limit .

1.4 REFERENCE STANDARDS

A. ASTM International:

1. ASTM C602 - Standard Specification for Agricultural Liming Materials.

B. Turfgrass Producers International:

1. TPI - Guideline Specifications To Turfgrass Sodding.

1.5 COORDINATION

A. Coordinate Work of this Section with installation of underground sprinkler system piping and watering heads.

1.6 SUBMITTALS

A. Product Data:

1. Submit sod producer's information for sod grass species.

B. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

C. Sod Producer's Certificate: Certify that sod grass meets or exceeds specified requirements.

D. Qualifications Statements:

1. Submit qualifications for sod producer, manufacturer, and installer.

1.7 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data:

1. Submit maintenance instructions, cutting method, and maximum grass height.
2. Submit fertilizer types, application frequency, and recommended coverage.

1.8 QUALITY ASSURANCE

A. Sod: Ensure root development capable of supporting its own weight without tearing when suspended vertically by holding upper two corners.

B. Perform Work according to New England Sod Producers Association standards.

1.9 QUALIFICATIONS

A. Sod Producer: Company specializing in products as specified in this Section with minimum three 3 years' documented experience.

B. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum three 3 years' documented experience.

C. Installer: Company specializing in performing Work of this Section with minimum three 3 years' documented experience and approved by sod producer.

1.10 DELIVERY, STORAGE, AND HANDLING

A. Delivery:

1. Deliver sod on pallets .
2. Do not deliver more sod than can be laid within 24 hours.

B. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.

C. Store materials according to manufacturer instructions.

D. Protection:

1. Protect materials from moisture and dust by storing in clean, dry location remote from construction operations areas.
2. Protect exposed roots from dehydration.
3. Provide additional protection according to manufacturer instructions.

1.11 AMBIENT CONDITIONS

A. Minimum Conditions: Do not place sod when temperature is lower than 32 <_____> deg. F.

PART 2 - PRODUCTS

2.1 SOD

A. Sod Growers:

1. SODCO, Inc 264 Exeter Road, Slocum, RI 02877 .
2. Furnish materials according to New England Sod Producers Association standards.

B. Description:

1. Cultivated grass sod with strong fibrous root system, free of stones and burned or bare spots.

2. Grade: Nursery grown Field grown .
3. Type: As indicated - Microclover- Black Beauty .
4. Percentage Grass Type:
   a. Golconda Tall Fescue : 29.72% pure seed with 90% germ rate.
   b. Dorado Tall Fescue : 19.74% pure seed with 90% germ rate .
   c. Montana Tall Fescue : 19.88% pure seed with 90% germ rate.
   d. Deep Blue Kentucky Bluegrass :7.72% pure seed with 85% germ rate .
   e. SPF 30 Hybrid Bluegrass: 5% pure seed with 85% germ rate
   f. Prosperity Kentucky Bluegrass: 4.91% pure seed with 85% germ rate.
   g. Singular Perennial Ryegrass: 4.97% pure seed with 90% germ rate.
   h. Frontier Perennial Ryegrass: 4.92% pure seed with 90% germ rate.
   i. Micro-Clover White Clover: 1.97% pure seed with 90% germ rate.
   j. Noxious weed: 0%
   k. Other/Crop Ingredients: 0%
   l. Inert Matter: 1.7%
   m. Weed Seed: 0%
5. Type: As indicated - Black Beauty Turf Type Fall Fescue
6. Percentage Grass Type:
   a. Golconda Tall Fescue: 29.72% pure seed with 92% germ rate.
   b. Montana Tall Fescue: 19.88% pure seed with 92% germ rate.
   c. Dorado Tall Fescue: 19.74% pure seed with 92% germ rate.
   d. Deep Blue Kentucky Bluegrass : 11.72% pure seed with 85% germ rate.
   e. Prosperity Kentucky Bluegrass: 7.91% pure seed with 85% germ rate.
   f. Frontier Perennial Ryegrass: 4.97% pure seed with 92% germ rate.
   g. Singular Perennial Ryegrass: 4.92% pure seed with 92% germ rate.
   h. Other/Crop Ingredients: 0%
   i. Inert Matter: 1.4%
   j. Weed Seed: 0%

C. Harvesting of Sod:

1. Machine-cut sod and load on pallets according to TPI .
2. Cut sod in area not exceeding 1 <_____> sq. yd., with minimum 1/2 <_____>-inch and maximum 1 <_____>-inch topsoil base.

2.2 MATERIALS

A. Topsoil:

1. Description: Fertile, agricultural soil typical for locality, capable of sustaining vigorous plant growth, and taken from drained Site.
2. Free of subsoil, clay, impurities, plants, weeds, and roots.
3. pH:
   a. Minimum: 5.4 .
   b. Maximum: 7.0 .

B. Topsoil: Excavated from Site and free of weeds.

2.3 ACCESSORIES

A. Fertilizer:

1. Grade: Commercial.
2. Description: As recommended for grass, with 50 percent of elements derived from organic sources.

B. Lime:

1. Description: Agricultural limestone containing a minimum of 80 percent calcium carbonate equivalent.
2. Comply with ASTM C602.

C. Water: Clean, fresh, and free of substances or matter capable of inhibiting vigorous growth of grass.

2.4 SOURCE QUALITY CONTROL

A. Provide recommendation for fertilizer and lime application rates for specified sod grass species based on testing.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that prepared soil base is ready to receive Work of this Section.

3.2 INSTALLATION

A. Subsoil Preparation:

1. Eliminate uneven areas and low spots.
2. Maintain indicated lines, levels, profiles, and contours.
3. Slopes:
   a. Make gradual changes in grade.
   b. Blend slopes into level areas.
4. Foreign Materials:
   a. Remove foreign materials and undesirable plants and their roots.
   b. Do not bury foreign materials beneath areas to be sodded.
5. Scarify subsoil to depth of 4 <_____> inches where topsoil is to be placed.
6. Repeat cultivation in areas where equipment used for hauling and spreading topsoil has compacted subsoil.

B. Placing of Topsoil:

1. Spread topsoil to minimum depth of 3 <_____> inches over area to be sodded.
2. Place topsoil during dry weather and on dry unfrozen subgrade.
3. Remove vegetable matter and foreign nonorganic material from topsoil while spreading.
4. Grade topsoil to eliminate rough, low, or soft areas, and to ensure positive drainage.

C. Fertilizing:

1. Apply Dolomitic or Calcitic Pelletized limestone at application rate of 5lb per 1000 sq.ft. Work lime into top 6 inches of soil or as directed by owner's representative.
2. Apply 19-19-19 use a starter fertilizer for Spring and Fall application rate of 5 lb per 1,000 sq.ft. or as directed by owner's representative..
3. Apply fertilizer after smooth raking of topsoil and prior to installation of sod.
4. Apply fertilizer no more than 48 hours before laying sod.
5. Mix fertilizer thoroughly into upper [**4**] <_____> inches of topsoil.
6. Lightly water soil to aid dissipation of fertilizer.

D. Laying of Sod:

1. Moisten prepared surface immediately prior to laying sod.
2. Lay sod immediately after delivery to Site to prevent deterioration.
3. Joints:
   a. Lay sod tightly with no open joints visible and no overlapping.
   b. Stagger end joints minimum 12 inches.
   c. Do not stretch or overlap sod pieces.
4. Lay smooth and align with adjoining grass areas.
5. Place top elevation of sod 1/2 <_____> inch below adjoining edging
6. Slopes:
   a. On slopes 6 <_____> in./ft. and steeper, lay sod perpendicular to slope and secure every row with wooden pegs at maximum 2 <_____> feet o.c.
   b. If using "big roll," lay sod parallel to slope.
   c. Drive pegs flush with soil portion of sod.
   d. Prior to placing sod on slopes exceeding 8 <_____> in./ft. or where indicated, place wire mesh over topsoil and securely anchor wire mesh in place with wood pegs sunk firmly into ground.
7. Watering:
   a. Water sodded areas immediately after installation.
   b. Saturate sod to 4 <_____> inches of soil.
8. Rolling:
   a. After sod and soil have dried, roll sodded areas to bond sod to soil and to remove minor depressions and irregularities.
   b. Roll sodded areas with roller not exceeding <_____> lb. .
   c. Roll before first watering.

3.3 MAINTENANCE

A. Turf Maintenance Service: Provide full maintenance by skilled employees of landscape Installer. Maintain as required in "Turf Maintenance" Article. Begin maintenance immediately after each

area in planted and continue until acceptable turf is established, but for not less than the following periods:

1. Sodded Turf: [30] days from date of [Planting Completion] or [Substantial Completion].
   a. When initial maintenance period has not elapsed before end of planting season, or if turf is not fully established, continue maintenance during next planting season.

B. Maintain sodded areas immediately after placement until grass is well established and exhibits vigorous growing condition for two cuttings .

C. Mowing:

1. Mow grass at regular intervals to maintain at maximum height of 2-1/2 <_____> inches.
2. Do not cut more than 1/3 of grass blade at each mowing.
3. Neatly trim edges and hand-clip where necessary.

D. Water to prevent grass and soil from drying out.

E. Immediately replace sod on areas showing deterioration or bare spots.

F. Protect sodded areas with warning signs during maintenance period.

END OF SECTION 329223

VICINITY MAP

GENERAL NOTES

1. ALL SITE PREPARATION NECESSARY TO COMPLETE THIS PROJECT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
2. ALL NECESSARY POLICE DETAIL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL COORDINATE WITH THE LOCAL POLICE DEPARTMENT.
3. THE CONTRACTOR SHALL MAKE ALL NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN ALL NECESSARY CONSTRUCTION PERMITS, PAY ALL FEES INCLUDING POLICE DETAILS AND POST ALL BONDS, IF NECESSARY, ASSOCIATED WITH THE SAME, AND COORDINATE WITH THE OWNER AND THE LANDSCAPE ARCHITECT.
4. ALL EXISTING CONDITIONS SHOWN SHALL BE CONSIDERED APPROXIMATE AND / ARE BASED ON THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE LANDSCAPE ARCHITECT PRIOR TO INSTALLING ANY PORTION OF THE SITE WORK WHICH WOULD BE AFFECTED.
5. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND.OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF VARIOUS UTILITY COMPANIES, AND WHEREVER POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY IN THE CITY, AND "DIGSAFE" (1-800-344-7233) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK IN PREVIOUSLY UNALTERED AREAS TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RESOLVE CONFLICTS BETWEEN THE PROPOSED UTILITIES AND FIELD-LOCATED UTILITIES AND SHALL REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT IMMEDIATELY. THE LANDSCAPE ARCHITECT ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED, INCOMPLETELY OR INACCURATELY SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCURATE RECORDS OF THE LOCATION AND ELEVATION OF ALL WORK INSTALLED AND EXISTING UTILITIES FOUND DURING CONSTRUCTION FOR THE PREPARATION OF THE AS-BUILT PLAN.
6. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EXISTING UTILITIES IN WORKING ORDER AND FREE FROM DAMAGE DURING THE ENTIRE DURATION OF THE PROJECT. ALL COST RELATED TO THE REPAIR OF UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. EXCAVATION REQUIRED WITHIN THE PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINE OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.
7. THE CONTRACTOR SHALL UTILIZE ALL PRECAUTIONS AND MEASURES TO ENSURE THE SAFETY OF THE PUBLIC, ALL PERSONNEL AND PROPERTY DURING CONSTRUCTION IN ACCORDANCE WITH OSHA STANDARDS, INCLUDING BARRICADES, SAFETY LIGHTING, CONES, POLICE DETAIL AND/OR FLAGMEN AS DETERMINED NECESSARY BY LANDSCAPE ARCHITECT AND/OR CITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF POLICE DETAIL AND FOR COORDINATING WITH THE LOCAL OR STATE POLICE DEPARTMENT FOR ALL REQUIRED POLICE DETAIL.
8. ALL TRENCH WORK WITHIN EXISTING PAVEMENT SHALL BE SAWCUT PER THE APPLICABLE DETAILS. TRENCHWORK BACKFILL AND COMPACTION SHALL HAVE MAX. 8-INCH LIFTS. CONTRACTOR SHALL BE REQUIRED TO REMOVE PATCH AND REPAVE AFTER ONE COMPLETE 12-MONTH CYCLE IF SETTLEMENT OCCURS DUE TO INADEQUATE COMPACTION AS DETERMINED BY LANDSCAPE ARCHITECT AND/OR ENGINEER WITHIN THE WARRANTY PERIOD.
9. CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS REGARDING NOISE, VIBRATION, DUST, SEDIMENTATION CONTAINMENT, AND TRENCH WORK.

PROVIDENCE, RI

NEUTACONKANUT PARK LITTLE LEAGUE FIELD IMPROVEMENTS RE-BID

HONORABLE
JORGE O. ELORZA,
MAYOR

WENDY NILSSON,
SUPERINTENDENT OF PARKS

JOHN J IGLIOZZI
WARD 7 COUNCILMAN

ISSUED FOR BID - MARCH 15,2021

10. THE CONTRACTOR SHALL RESTORE ALL SURFACES EQUAL TO THEIR ORIGINAL CONDITION AFTER CONSTRUCTION IS COMPLETE. AREAS NOT DISTURBED BY CONSTRUCTION SHALL BE LEFT NATURAL. THE CONTRACTOR SHALL TAKE CARE TO PREVENT DAMAGE TO SHRUBS, TREES, OTHER LANDSCAPING AND/OR NATURAL FEATURES. WHEREAS THE PLANS DO NOT SHOW ALL LANDSCAPING FEATURES, EXISTING CONDITIONS MUST BE VERIFIED BY THE CONTRACTOR IN ADVANCE OF THE WORK.
11. ALL UNPAVED AREAS DISTURBED BY THE WORK SHALL HAVE A MINIMUM OF 4-INCHES OF LOAM INSTALLED AND SEEDED WITH GRASS SEED AS SHOWN ON THE PLAN AND/OR DIRECTED BY THE LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING ANY LOAM AND SEEDED AREAS UNTIL LAWN GROWTH IS ESTABLISHED AND APPROVED BY THE LANDSCAPE ARCHITECT AND/OR OWNER.
12. THE CONTRACTOR SHALL REGULARLY INSPECT THE PERIMETER OF THE PROPERTY TO CLEAN UP AND REMOVE LOOSE CONSTRUCTION DEBRIS BEFORE IT LEAVES THE SITE. ALL DEMOLITION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE SITE TO AN APPROVED DUMP SITE. ALL TRUCKS LEAVING THE SITE SHALL BE COVERED.
13. IF ANY DEVIATION OR ALTERATION OF THE WORK PROPOSED ON THESE DRAWINGS IS REQUIRED, THE CONTRACTOR IS TO IMMEDIATELY CONTACT AND COORDINATE WITH THE LANDSCAPE ARCHITECT AND OWNER.
14. AT THE END OF CONSTRUCTION, THE CONTRACTOR SHALL REMOVE ALL CONSTRUCTION DEBRIS AND SURPLUS MATERIAL FROM THE SITE. A THOROUGH INSPECTION OF THE WORK PERIMETER IS TO BE MADE AND ALL DISCARDED MATERIALS, BLOWN OR WATER CARRIED DEBRIS, SHALL BE COLLECTED, AND REMOVED FROM THE SITE.

SHEET SCHEDULE

NEUTACONKANUT PARK LEGEND

- LIGHTING
- BENCH
- SIGN
- EXISTING TREE
- EXISTING IRRIGATION HEAD
- TELE — TELEPHONE LINE
- UGE — UNDERGROUND ELECTRICAL LINE
- W — WATER LINE
- EXISTING FENCE
- PROPOSED FENCE
- VANISHING LINE
- FLAG POLE
- TREE PROTECTION
- VEGETATIVE BUFFER
- LOD — LIMIT OF DISTURBANCE
- LOW — LIMIT OF WORK
- PROPOSED CONTOUR
- EXISTING CONTOUR
- SAW CUT
- 100.00 DISCRIPTION — PROPOSED SPOT ELEVATION
- 100.00 DISCRIPTION — EXISTING SPOT ELEVATION
- LOAM AND SEED
- LOAM AND SOD
- CLAY INFIELD
- SNOW/BARRIER FENCING
- TR — TRENCH LINE
- STRIP TURF AND TOP SOIL
- STRIP CLAY INFIELD
- UTILITY POLE
- SEWER MANHOLE
- MP — METER PIT
- POB — POINT OF BEGIN
- SF — SILT FENCE
- SS — SILT SOCK
- HUNTER I-25 (R) ROTARY HEAD (FULL CIRCLE)
- HUNTER I-25 (R) ROTARY HEAD (HALF CIRCLE)
- HUNTER I-25 (R) ROTARY HEAD (QUARTER CIRCLE)
- HUNTER I-25 (SS) ROTARY HEAD (HALF CIRCLE)
- HUNTER I-25 (SS) ROTARY HEAD (QUARTER CIRCLE)
- RB QVC IN 10" LOCKABLE BOX
- RB 150 PEB CONTROL VALVE
- 2" BALL VALVE
- IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21
- IRRIGATION MAINLINE: 2.5" PVC CLASS 200 SDR 21
- R — RAIN BIRD WR2-RFC RAIN SHUT-OFF DEVICE I
- C — RAIN BIRD 20-STA. ESP-LXMEF CONTROLLER

ISSUED FOR BID

PROVIDENCE
PARKS DEPARTMENT
DALRYMPLE BOATHOUSE
ROGER WILLIAMS PARK
PROVIDENCE, RI 02907

NO.	REVISION	DATE

NEUTACONKANUT PARK LITTLE LEAGUE FIELD IMPROVEMENTS RE-BID

TITLE SHEET

NEUTACONKANUT PARK LITTLE LEAGUE FIELD IMPROVEMENTS
899 PLAINFIELD STREET PROVIDENCE, RI

FILE: NeutParkLLBB_2020_CP.dwg

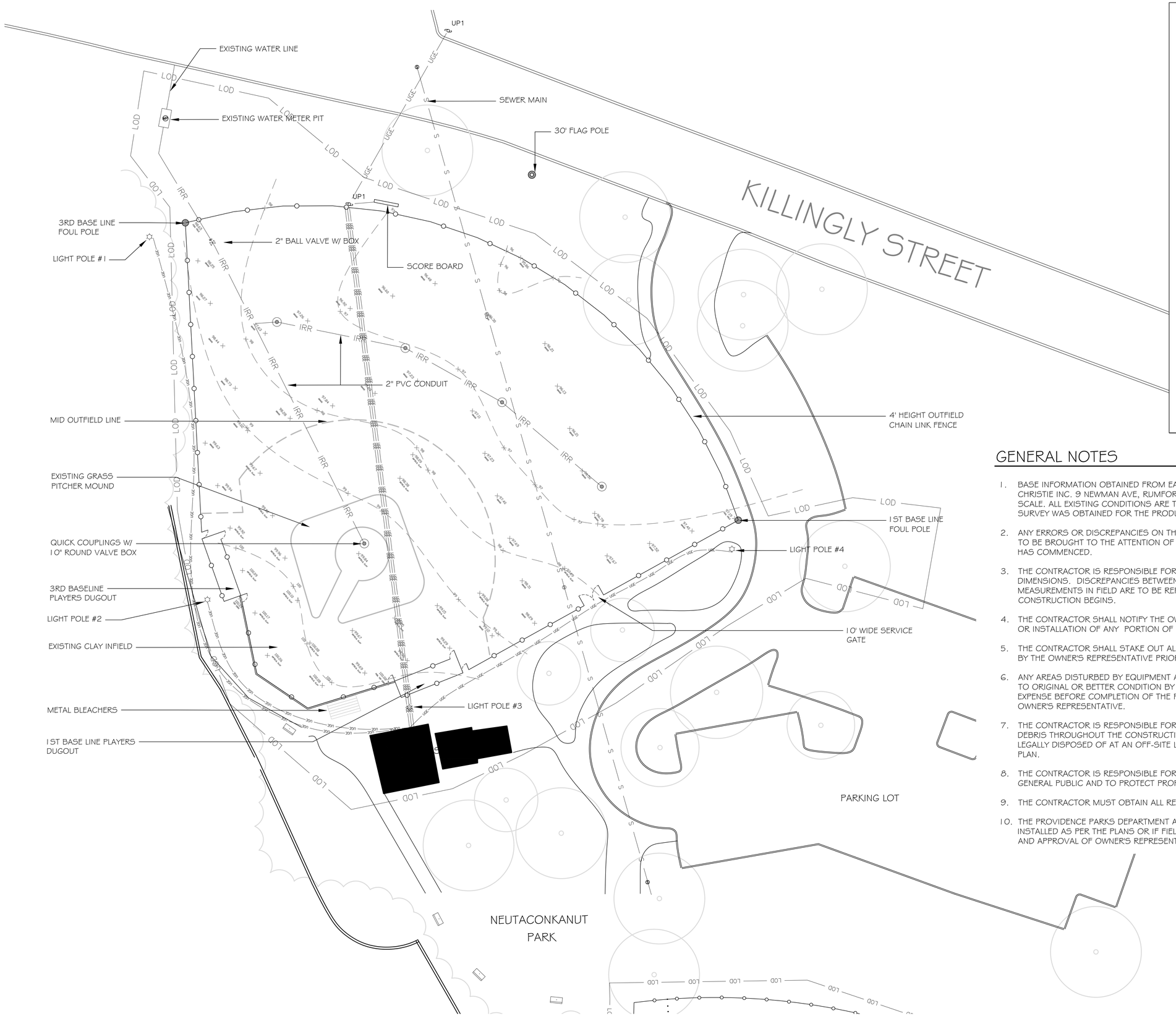
DATE: 3/4/21

SCALE: NTS

DRAWN BY: ES

CHECKED/ APPROVED: BB

SHEET NO. L-1 OF L-10



LEGEND

- LIGHTING
- BENCH
- SIGN
- EXISTING TREE
- EXISTING IRRIGATION HEAD
- TELE — TELEPHONE LINE
- UGE — UNDERGROUND ELECTRICAL LINE
- W — WATER LINE
- FLAG POLE
- EXISTING FENCE
- VEGETATIVE BUFFER
- LOD — LIMIT OF DISTURBANCE
- UTILITY POLE
- S — SEWER MANHOLE
- MP — METER PIT
- 100.00 DISCRIPTION — EXISTING SPOT ELEVATION

GENERAL NOTES

1. BASE INFORMATION OBTAINED FROM EAGLE VIEW MAP AND WAYGAND ORCIUCH AND CHRISTIE INC. 9 NEWMAN AVE, RUMFORD, RI 02916 DATED JUNE 23, 1989 AT 1"=20' SCALE. ALL EXISTING CONDITIONS ARE TO BE CONSIDERED APPROXIMATE. NO REGISTERED SURVEY WAS OBTAINED FOR THE PRODUCTION OF THE EXISTING CONDITIONS PLAN.
2. ANY ERRORS OR DISCREPANCIES ON THE DRAWINGS, SHOP DRAWINGS, AND DETAILS ARE TO BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE BEFORE THE WORK HAS COMMENCED.
3. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL LOCATIONS AND DIMENSIONS. DISCREPANCIES BETWEEN LAYOUT DIMENSIONS ON PLANS AND ACTUAL MEASUREMENTS IN FIELD ARE TO BE REPORTED TO THE OWNER'S REPRESENTATIVE BEFORE CONSTRUCTION BEGINS.
4. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO DEMOLITION OR INSTALLATION OF ANY PORTION OF THE SITE WORK .
5. THE CONTRACTOR SHALL STAKE OUT ALL LAYOUTS OF PROPOSED WORK FOR APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCING WORK.
6. ANY AREAS DISTURBED BY EQUIPMENT AND/OR MATERIAL STORAGE ARE TO BE RESTORED TO ORIGINAL OR BETTER CONDITION BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE BEFORE COMPLETION OF THE PROJECT, AND ARE SUBJECT TO APPROVAL BY OWNER'S REPRESENTATIVE.
7. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE SITE CLEAN OF MISCELLANEOUS DEBRIS THROUGHOUT THE CONSTRUCTION PERIOD. ALL WASTE MATERIAL IS TO BE LEGALLY DISPOSED OF AT AN OFF-SITE LOCATION, UNLESS OTHERWISE INDICATED ON THE PLAN.
8. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SITE FOR THE SAFETY OF THE GENERAL PUBLIC AND TO PROTECT PROPERTY AGAINST VANDALISM AND THEFT.
9. THE CONTRACTOR MUST OBTAIN ALL REQUIRED CITY, STATE AND FEDERAL PERMITS.
10. THE PROVIDENCE PARKS DEPARTMENT ASSUMES NO RESPONSIBILITY IF THE WORK IS NOT INSTALLED AS PER THE PLANS OR IF FIELD CHANGES ARE MADE WITHOUT THE KNOWLEDGE AND APPROVAL OF OWNER'S REPRESENTATIVE.

N

0 10 20 40

ISSUED FOR BID

PROVIDENCE PARKS DEPARTMENT
DALRYMPLE BOATHOUSE
ROGER WILLIAMS PARK
PROVIDENCE, RI 02907

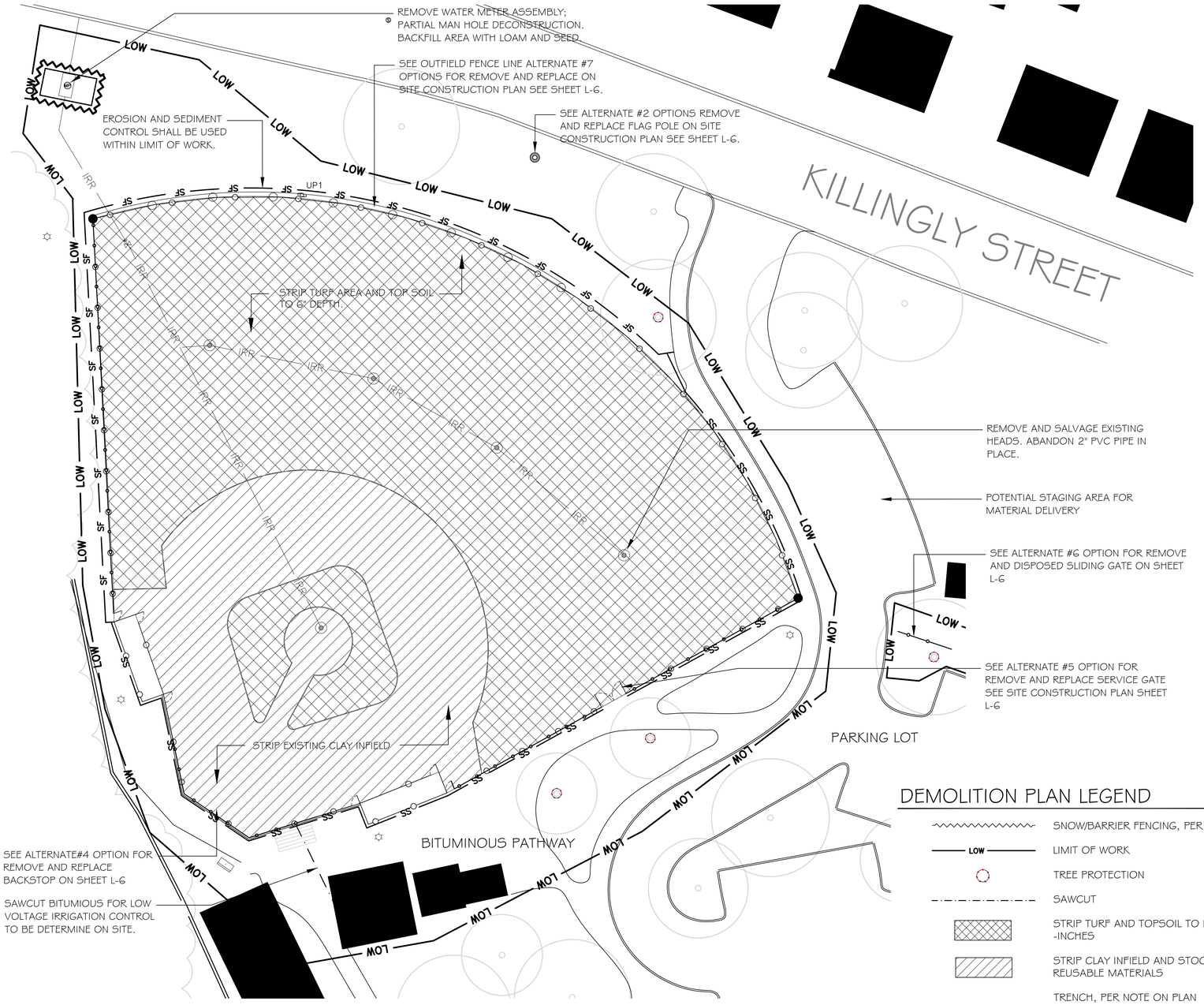
NO.	REVISION	DATE

EXISTING CONDITION PLAN

NEUTACONKANUT PARK LITTLE LEAGUE FIELD IMPROVEMENTS RE-BID
899 PLAINFIELD STREET PROVIDENCE, RI

FILE: NeutParkLLBB_2020_EX_2.dwg

DATE: 3/4/21
SCALE: 1" = 20'-0"
DRAWN BY: ES
CHECKED/ APPROVED: BB
SHEET NO. L-2
OF L-10



DEMOLITION PLAN LEGEND

- SNOW/BARRIER FENCING, PER SPEC
- LOW — LIMIT OF WORK
- TREE PROTECTION
- SAWCUT
- STRIP TURF AND TOPSOIL TO DEPTH 6 -INCHES
- STRIP CLAY INFIELD AND STOCK PILE REUSABLE MATERIALS
- TRENCH, PER NOTE ON PLAN

DEMOLITION PLAN NOTES

1. ALL SITE PREPARATION NECESSARY TO COMPLETE THIS PROJECT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH PROVIDENCE PARKS DEPARTMENT STAFF TO DEVELOP A SUITABLE DEMOLITION PLAN, WHICH WILL MINIMIZE PARK DISTURBANCE AND ALLOW ALL FACILITIES TO REMAIN IN OPERATION DURING THE ENTIRETY OF CONSTRUCTION.
3. UNLESS OTHERWISE NOTED, THE CONTRACTOR IS RESPONSIBLE FOR THE RELOCATION, DEMOLITION, REMOVAL AND DISPOSAL, IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES, OF ALL EXISTING SITE ELEMENTS AND STRUCTURES INCLUDING BUT NOT LIMITED TO BITUMINOUS CONCRETE, CEMENT CONCRETE, GRAVEL, CURBS, WALKWAYS, SIDEWALKS, BERMS, FENCES, BOLLARDS, POSTS, PLANTING BEDS, TREES, SHRUBS, UTILITIES, DRAINAGE STRUCTURES AND ALL OTHER STRUCTURES SHOWN WITHIN THE LIMITS, AND WHERE NEEDED, TO ALLOW FOR NEW CONSTRUCTION. ALL ELEMENTS TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER SPECIFICATIONS.
4. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING OF THE DEBRIS IN A PROPER AND LEGAL MANNER.
5. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND.OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF VARIOUS UTILITY COMPANIES, AND WHEREVER POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY IN THE CITY, AND "DIGSAFE" (1-800-344-7233) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK IN PREVIOUSLY UNALTERED AREAS TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RESOLVE CONFLICTS BETWEEN THE PROPOSED UTILITIES AND FIELD-LOCATED UTILITIES AND SHALL REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT IMMEDIATELY. THE OWNER ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED, INCOMPLETELY OR INACCURATELY SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACCURATE RECORDS OF THE LOCATION AND ELEVATION OF ALL WORK INSTALLED AND EXISTING UTILITIES FOUND DURING CONSTRUCTION FOR THE PREPARATION OF THE AS-BUILT PLAN.
6. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EXISTING UTILITIES IN WORKING ORDER AND FREE FROM DAMAGE DURING THE ENTIRE DURATION OF THE PROJECT. ALL COST RELATED TO THE REPAIR OF UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. EXCAVATION REQUIRED WITHIN THE PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINE OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.
7. THE CONTRACTOR SHALL MAINTAIN CONTINUOUS ACCESS AND OPERATION FOR SURROUNDING FACILITIES, AS DEEMED BY THE OWNER, AT ALL TIMES DURING DEMOLITION OF THE EXISTING FACILITIES.
8. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES AND TREE PROTECTIVE MEASURES ARE TO BE INSTALLED.

EROSION & SEDIMENT CONTROL (ESC) NOTES

1. THE SITE CONSTRUCTION FOREMAN SHALL BE DESIGNATED AS THE ON-SITE PERSONNEL RESPONSIBLE FOR THE DAILY INSPECTION AND MAINTENANCE OF ALL ESC MEASURES AND SHALL IMPLEMENT ALL NECESSARY MEASURES TO CONTROL EROSION AND PREVENT SEDIMENT FROM LEAVING THE SITE.
2. THE CONTRACTOR SHALL INSTALL ALL ESC MEASURES AS SHOWN ON THE DESIGN PLANS AND AS DETERMINED NECESSARY IN THE FIELD BY LANDSCAPE ARCHITECT BEFORE ANY CONSTRUCTION ACTIVITIES ARE TO BEGIN. THESE MEASURES SHALL BE CHECKED, MAINTAINED/REPLACED AS NECESSARY DURING THE ENTIRE CONSTRUCTION PERIOD OF THE PROJECT. SUCH MEASURES SHALL REPRESENT THE LIMIT OF WORK. WORKERS SHALL BE INFORMED THAT NO CONSTRUCTION ACTIVITY IS TO OCCUR BEYOND THE LIMIT OF WORK AT ANY TIME THROUGH THE CONSTRUCTION PERIOD.
3. A MINIMUM SURPLUS OF 100 FEET OF EROSION CONTROL BARRIER (SILT FENCE&/OR SILT SOCK) SHALL BE STOCKPILED ONSITE AT ALL TIMES.
4. THE CONTRACTOR SHALL PROTECT THE ADJACENT AREA FROM SEDIMENTATION DURING PROJECT CONSTRUCTION EXIT TO BE REPLACED/CLEANED AS NEEDED TO MAINTAIN ITS EFFECTIVENESS.
5. A CONSTRUCTION EXIT SHALL BE CONSTRUCTED TO SHED DIRT FROM CONSTRUCTION VEHICLE TIRES. THE CONSTRUCTION EXIT SHALL BE REPLACED/CLEANED AS NEEDED TO MAINTAIN ITS EFFECTIVENESS.
6. THE LIMIT OF ALL CLEARING, GRADING AND DISTURBANCES SHALL BE KEPT TO A MINIMUM WITHIN THE PROPOSED AREA OF CONSTRUCTION. THE CONTRACTOR SHALL PHASE THE SITE WORK IN A MANNER TO MINIMIZE AREAS OF EXPOSED SOIL.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MONITOR LOCAL WEATHER REPORTS DURING CONSTRUCTION AND PRIOR TO SCHEDULING EARTHMOVING OR OTHER CONSTRUCTION ACTIVITIES WHICH WILL LEAVE LARGE DISTURBED AREAS UNSTABILIZED. IF INCLEMENT WEATHER IS PREDICTED, THE CONTRACTOR SHALL USE THEIR BEST PROFESSIONAL JUDGEMENT AND SHALL BE RESPONSIBLE FOR ENSURING THAT NECESSARY EROSION CONTROL DEVICES ARE INSTALLED AND FUNCTIONING PROPERLY TO MINIMIZE EROSION FROM ANY IMPENDING WEATHER EVENTS.
8. SOIL ESC MEASURES SHALL BE INSPECTED AND MAINTAINED ON A WEEKLY BASIS AND AFTER EACH RAINFALL EVENT OF 0.25 INCH OR GREATER DURING CONSTRUCTION TO ENSURE THAT THE ESC MEASURES ARE INTACT AND FUNCTIONING PROPERLY. IDENTIFIED DEFICIENCIES SHALL BE CORRECTED IMMEDIATELY NO LATER THAN 24 HOURS AFTER IDENTIFICATION.
9. SOIL STOCKPILES LEFT OVERNIGHT SHALL BE SURROUNDED ON THEIR PERIMETERS WITH SILT SOCK.
10. DISTURBED AREAS AND SLOPES SHALL NOT BE LEFT UNATTENDED OR EXPOSED FOR EXCESSIVE PERIODS OF TIME SUCH AS THE INACTIVE WINTER SEASON. THE CONTRACTOR SHOULD PROVIDE APPROPRIATE STABILIZATION PRACTICES ON ALL DISTURBED AREAS AS SOON AS POSSIBLE BUT NOT MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY AREAS HAVING A SLOPE GREATER THAN 3:1 SHALL BE REINFORCED WITH EROSION BLANKETS OR APPROVED EQUAL UNTIL THE SITE IS PROPERLY STABILIZED. TEMPORARY SWALES MAY ALSO BE REQUIRED IF DETERMINED NECESSARY IN THE FIELD BY THE LANDSCAPE ARCHITECT.
11. THE CONTRACTOR SHALL INSTALL A SILT SACK IN EACH EXISTING CATCH BASIN RECEIVING RUNOFF FROM THE SITE SHOWN IN THE DRAWINGS. THESE ARE TO BE INSPECTED AFTER EACH SIGNIFICANT STORM EVENT AND REMOVED AND EMPTIED AS NEEDED.
12. THE CONTRACTOR SHALL CONTAIN ALL SEDIMENT ONSITE. ALL EXITS FROM THE SITE WILL BE SWEPT AS NECESSARY INCLUDING ANY SEDIMENT TRACKING. PAVED AREAS SHALL BE SWEPT AS NEEDED TO REMOVE SEDIMENT AND POTENTIAL POLLUTANTS WHICH MAY ACCUMULATE DURING SITE WORK.
13. ACCUMULATED SEDIMENT SHALL BE REMOVED FROM ALL ESC MEASURES AND DISPOSED OF IN A PRE-APPROVED LOCATION BY THE CONTRACTOR.
14. PROPER MEASURES SHALL BE IMPLEMENTED BY THE CONTRACTOR IF DEWATERING IS NECESSARY DURING CONSTRUCTION. THESE MEASURES SHALL INCLUDE DEWATERING BAGS, TEMPORARY STRAWBALES, SILT FENCES, SILT SOCK AND/OR OTHER APPROVED DEVICES. THE DEWATERING SETUP SHALL BE APPROVED BY THE ENGINEER.
15. DUST SHALL BE CONTROLLED BY WATERING OR OTHER APPROVED METHODS AS NECESSARY.
16. THE CONTRACTOR IS RESPONSIBLE FOR THE INSPECTION AND MAINTENANCE OF DURING CONSTRUCTION. ANY SEDIMENT OR DEBRIS COLLECTED WITHIN THESE FACILITIES FROM THE PROJECT WORK SHALL BE REMOVED PRIOR TO OWNER'S ACCEPTANCE.

0 10' 20' 40'

N

ISSUED FOR BID

PROVIDENCE PARKS DEPARTMENT

DALRYMPLE BOATHOUSE
ROGER WILLIAMS PARK
PROVIDENCE, RI 02907

NO.	REVISION	DATE

DEMOLITION PLAN

NEUTACONKANUT PARK LITTLE LEAGUE FIELD IMPROVEMENTS RE-BID
899 PLAINFIELD STREET PROVIDENCE, RI

FILE: NeutParkLLBB_2020_DM.dwg

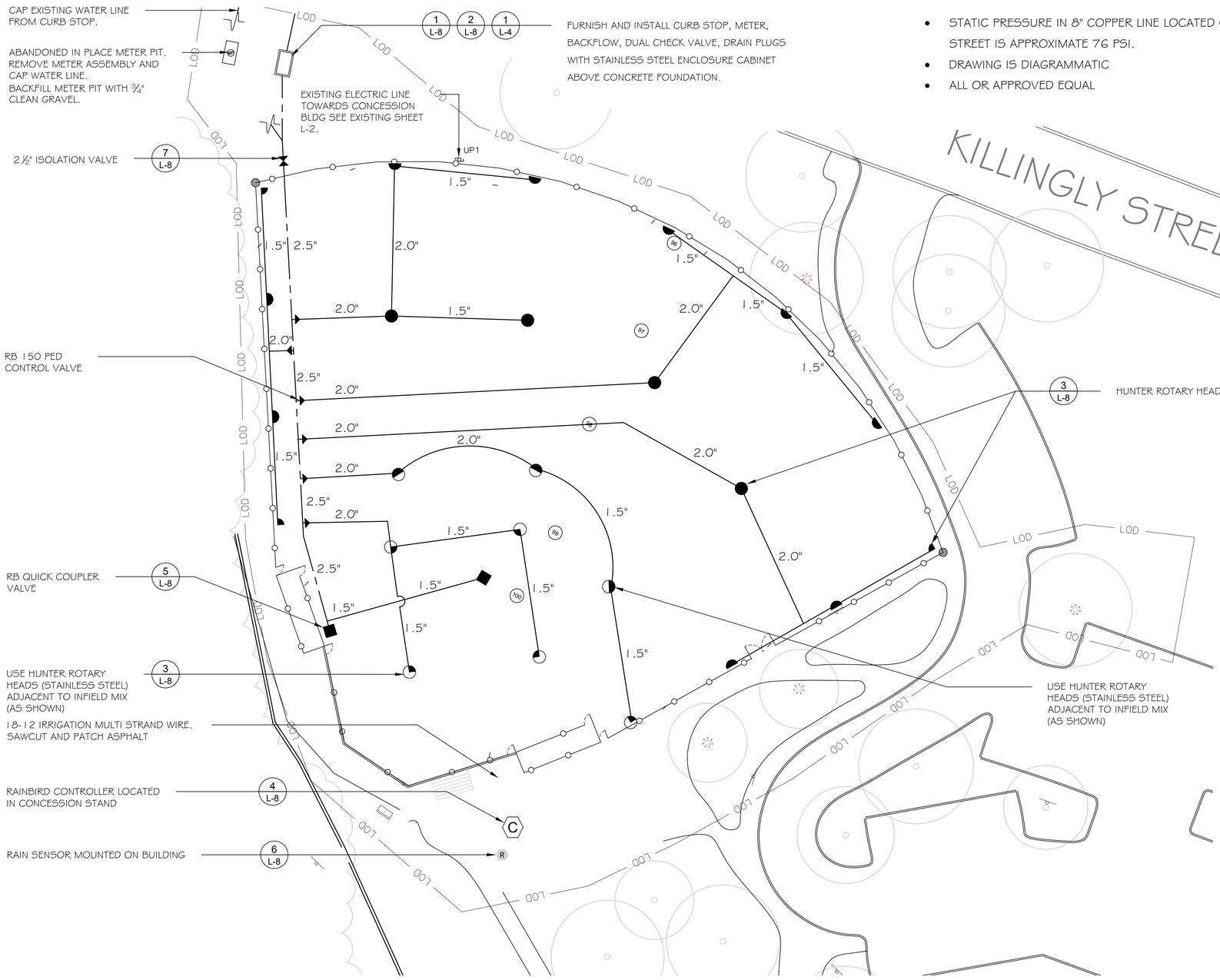
DATE: 3/4/21

SCALE: 1"= 20'-0"

DRAWN BY: ES

CHECKED/ APPROVED: BB

SHEET NO. L-3 OF L-10



CONSTRUCTION NOTE

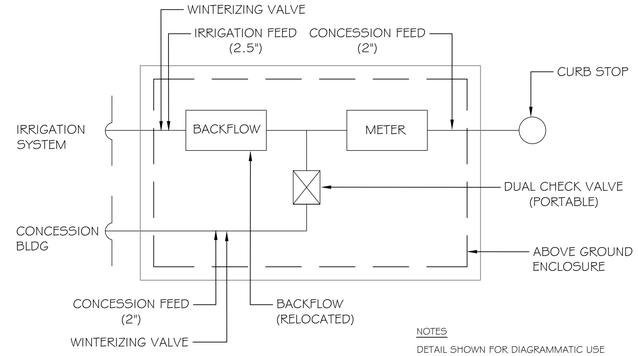
- STATIC PRESSURE IN 8" COPPER LINE LOCATED ON KILLINGLY STREET IS APPROXIMATE 76 PSI.
- DRAWING IS DIAGRAMMATIC
- ALL OR APPROVED EQUAL

IRRIGATION SCOPE

1. MARK OUT PROPOSED IRRIGATION HEADS AND VALVE BOXES.
2. REPLACE EXISTING METER PIT WITH SERVICE CABINET.
3. CONTRACTOR REMOVE AND SALVAGE EXISTING IRRIGATION HEADS, CONTROL VALVE AND CONTROLLER.
4. CONTRACTOR RE-INSTALL EXISTING 2" WATER LINE TO WATER SERVICE CABINET SBBC-75ALHP AND PVD WATER APPROVES COPPER LINE, BACKFLOW AND METER (AS SPECIFIED BY PVD WATER).
5. CONTRACTOR PAYS FOR NEW WATER SERVICE INSTALLATION.
6. CONTRACTOR INSTALL 2.5" PVC TO FIELD WITH APPROPRIATE THRUST BLOCKING.
7. CONTRACTOR INSTALLS SPRINKLERS, WIRING, PIPING AND CONTROLLER.

IRRIGATION SCHEDULE

- HUNTER I-25 (R) ROTARY HEAD (FULL CIRCLE)
- HUNTER I-25 (R) ROTARY HEAD (HALF CIRCLE)
- HUNTER I-25 (R) ROTARY HEAD (QUARTER CIRCLE)
- HUNTER I-25 (SS) ROTARY HEAD (HALF CIRCLE)
- HUNTER I-25 (SS) ROTARY HEAD (QUARTER CIRCLE)
- RB QVC IN 10" LOCKABLE BOX
- RB 150 PEB CONTROL VALVE
- 2" BALL VALVE
- IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21
- IRRIGATION MAINLINE: 2.5" PVC CLASS 200 SCR 21
- (R) RAIN BIRD WR2-RFC RAIN SHUT-OFF DEVICE1
- (C) RAIN BIRD 20-STA. ESP-LXMEF CONTROLLER (METAL PED)



NOTES

DETAIL SHOWN FOR DIAGRAMMATIC USE ONLY.

ASSEMBLY SHALL CONFORM TO PROVIDENCE WATER STANDARDS AND GUIDE LINES.

REFER TO NOTES AND TABLES AS PROVIDED BY PROVIDENCE WATER STANDARD BACK FLOW AND METER DETAILS SHEET

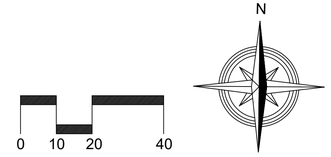
1 L-4 METER WITH DUAL CHECK VALVE DIAGRAM

(NOT TO SCALE)

NeutPParkLLBB_2020_IR.dwg

IRRIGATION NOTES

1. PIPE AND VALVE LOCATIONS ARE DIAGRAMMATIC, CONTRACTOR SHALL FIELD VERIFY.
2. CONTROL WIRE SHALL BE #14 GAUGE SINGLE STRAND RED, COMMON WIRE SHALL BE #12 GAUGE SINGLE STRAND WHITE, AND SPARE WIRES, INSTALLED WHERE SHOWN, SHALL BE #14 GAUGE SINGLE STRAND BLUE.
3. QUICK COUPLING VALVES SHALL BE INSTALLED ON 1" PVC SWING JOINTS WITH BRASS INSERTS AND STABILIZERS (SEE DETAIL).
4. ROTARY SPRINKLERS SHALL BE INSTALLED ON 1" PVC PREFABRICATED UNITIZED SWING JOINT ASSEMBLIES WITH INTEGRAL O-RINGS.
5. IRRIGATION SYSTEM IS DESIGNED TO SUPPLY 50 GPM MAX FROM NEW 2" SERVICE. SYSTEM TO PRODUCE 70-PSI DYNAMIC PRESSURE AT IRRIGATION CONTRACTOR'S POINT OF CONNECTION DOWN STREAM OF NEW BOOSTER PUMP.
6. CONTRACTOR SHALL TEST DYNAMIC PRESSURE BEFORE STARTING WORK. REPORT ANY DEVIATION FROM PRESSURE REQUIRED TO OWNER'S REPRESENTATIVE BEFORE CONTINUING.
7. INSTALL CONTROLLER IN CONCESSIONS MECHANICAL ROOM AS DIRECTED BY OWNER'S REPRESENTATIVE, HARD WIRE TO 120 VOLT BUILDING POWER SUPPLY. ROUTE ZONE AND SPARE WIRES TO CONTROLLER VIA 2" CONDUIT.
8. INSTALL RAIN SENSOR ON EXTERIOR BUILDING WALL WHERE DIRECTED BY OWNER'S REPRESENTATIVE. EXTERIOR RAIN SENSOR WIRING SHALL BE CONTAINED IN 1/2" SCHEDULE PVC ELECTRICAL CONDUIT, SECURED TO OUTSIDE OF BUILDING WALL.
9. COORDINATE LOCATION OF EXISTING AND FUTURE UTILITIES ON SITE AND CONTACT PROPER AUTHORITIES AND UTILITY COMPANIES BEFORE THE START OF WORK.
10. FLUSH LATERAL LINES BEFORE INSTALLING SPRINKLERS.
11. CONTRACTOR MUST PROVIDE PRODUCT SUBMITTALS AS PER THE WRITTEN SPECIFICATIONS TO THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO ORDERING MATERIAL AND BEGINNING WORK.
12. ONCE APPROVED SUBMITTALS HAVE BEEN RETURNED TO THE CONTRACTOR WORK MAY BEGIN. THE OWNER'S REPRESENTATIVE MUST BE NOTIFIED A MINIMUM OF SEVEN (7) DAYS IN ADVANCE OF WORK TO COORDINATE ON-SITE SUPERVISION AND ADMINISTRATION.
13. SEE IRRIGATION DETAILS AND SPECIFICATIONS FOR ADDITIONAL NECESSARY INFORMATION.
14. CONTRACTOR TO VERIFY PRESSURE AND VOLUME PRIOR TO INSTALLATION.



ISSUED FOR BID

PROVIDENCE PARKS DEPARTMENT

DALRYMPLE BOATHOUSE
ROGER WILLIAMS PARK
PROVIDENCE, RI 02907

NO.	REVISION	DATE
2	ADD#2	1/21/21

IRRIGATION PLAN

NEUTACONKANUT PARK LITTLE LEAGUE FIELD IMPROVEMENTS RE-BID

899 PLAINFIELD STREET PROVIDENCE, RI

FILE: NeutPParkLLBB_2020_IR.dwg

DATE: 3/4/21

SCALE: 1"=20'-0"

DRAWN BY: ES

CHECKED/ APPROVED: BB

SHEET NO. L-4

OF L-10

EROSION AND SEDIMENT CONTROL SHALL BE USED WITHIN LIMIT OF DISTURBANCE.

8 L-9

PARKING AREA

EDGE OF SOD INFIELD

TREE PROTECTION 3 L-10

BITUMINOUS PATHWAY

GRADING LEGEND

- P.O.B. (LOCATION) — POINT OF BEGINNING
- 100.00 DISCRIPTION — PROPOSED SPOT ELEVATION
- 100.00 DISCRIPTION — EXISTING SPOT ELEVATION
- TREE PROTECTION
- EXISTING FENCE
- PROPOSED NEW FENCE
- SF — SILT FENCE
- SS — SILT SOCK
- LOD — LIMIT OF DISTURBANCE
- VANISHING LINE
- PROPOSED CONTOUR
- EXISTING CONTOUR

0 5' 10' 20

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PROVIDENCE PARKS DEPARTMENT

DALRYMPLE BOATHOUSE
ROGER WILLIAMS PARK
PROVIDENCE, RI 02907

NO.	REVISION	DATE

GRADING PLAN

NEUTACONKANUT PARK LITTLE LEAGUE FIELD IMPROVEMENTS RE-BID

899 PLAINFIELD STREET PROVIDENCE, RI

FILE: NeutParkLLBB_2020_GR.dwg

DATE: 3/4/21

SCALE: 1" = 10'-0"

DRAWN BY: ES

CHECKED/ APPROVED: BB

SHEET NO. L-5 OF L-10

REMOVE AND RELOCATE METER PIT INTO NEW ENCLOSURE BOX ABOVE GROUND. BACKFILL MANHOLE WITH CLEAN GRAVEL.

BASE BID

SCRAPE, PRIME AND PAINT FOUL POLES WITH TWO COATS YELLOW EXTERIOR PAINT

BASE BID

REMOVE AND RESET (4) EXISTING PEDESTRIAN GATES. ALIGN GATES EVENLY WITH FENCE. FURNISH AND INSTALL POST CAPS AS NEEDED.

BASE BID

ADD ALTERNATE #3

- REMOVE AND DISPOSE EXISTING DUGOUT MESH FABRIC ONLY.
- FURNISH AND INSTALL 9 GAUGE BLACK VINYL MESH FABRIC AROUND ENTIRE DUGOUT REUSE HARDWARE REPLACE AS NEEDED.
- TERMINATE NEW MESH AT THE EDGE OF BACKSTOP.

BASE BID - NO WORK

ADD ALTERNATE #4

- REMOVE AND DISPOSE EXISTING BACKSTOP MESH.
- FURNISH AND INSTALL FROM MID-RAIL AND BELOW OF BACKSTOP WITH 6 GAUGE BLACK VINYL MESH.
- FURNISH AND INSTALL FROM MID-RAIL AND ABOVE BACKSTOP WITH 9 GAUGE BLACK VINYL MESH AND CANOPY HARDWARE.

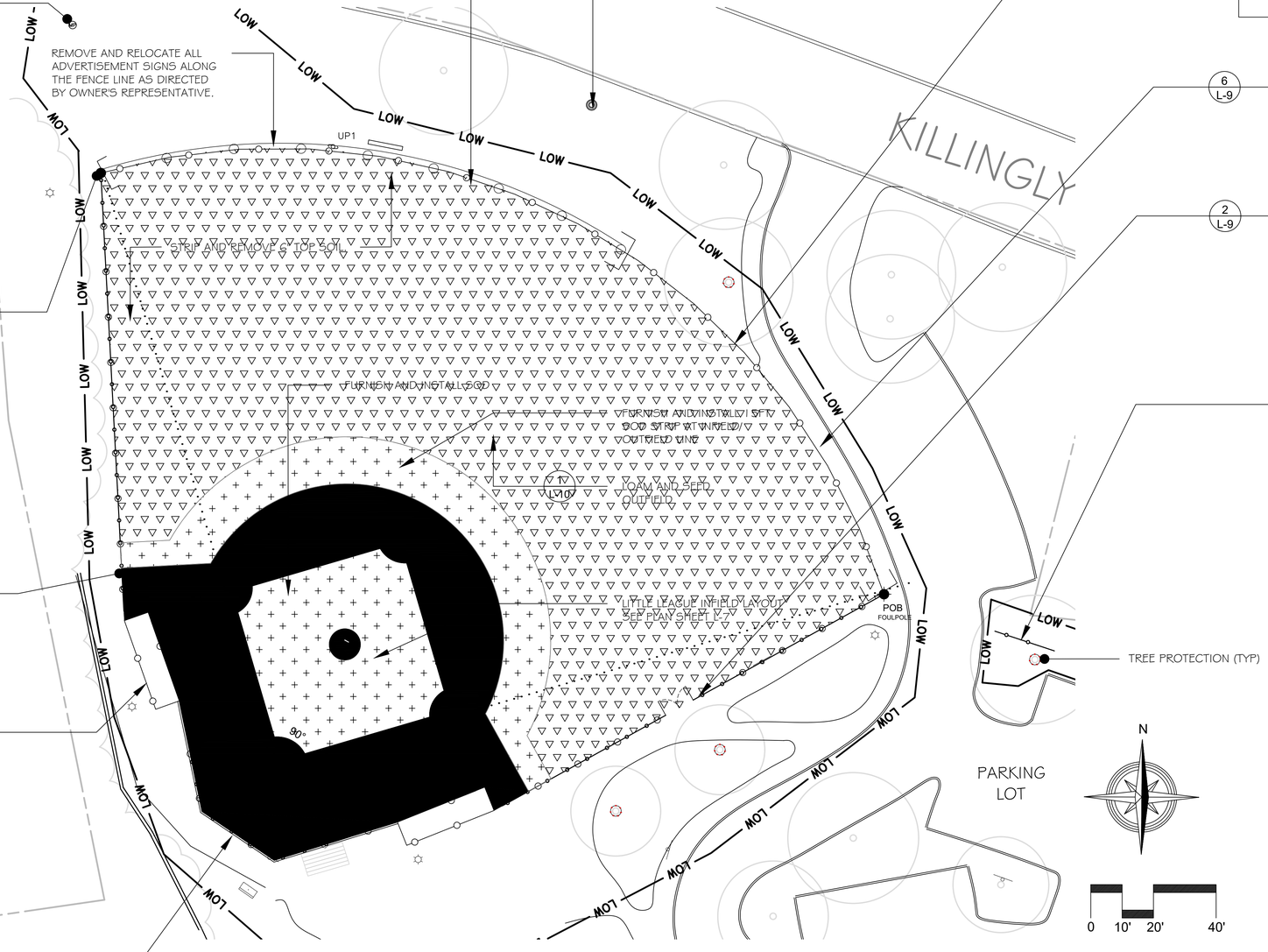
BASE BID - NO WORK

ADD ALTERNATE #1

- FURNISH AND INSTALL 200 LINEAR FOOT NETTING CABLES AND HARD WARES TO BE PROVIDED BY BEACON ATHLETICS OR APPROVED EQUAL.
- BARRIER NETTING SHALL BE ENGINEER APPROVED FOR MANUFACTURER WARRANTY.

BASE BID - NO WORK

REMOVE AND RELOCATE ALL ADVERTISEMENT SIGNS ALONG THE FENCE LINE AS DIRECTED BY OWNER'S REPRESENTATIVE.



4 L-10

ADD ALTERNATE #2

- REMOVE AND DISPOSE EXISTING FLAG POLE AND FOUNDATION.
- FURNISH AND INSTALL 25' HEIGHT FIBERGLASS FLAGPOLE WITH REINFORCE CONCRETE FOUNDATION BY CARROT-TOP INC OR APPROVED EQUAL
- FURNISH AND INSTALL SOLAR DISK FLAGPOLE LIGHT BY CARROT-TOP INC OR APPROVED EQUAL.

BASE BID - NO WORK

ADD ALTERNATE #7

- REMOVE AND DISPOSE EXISTING 4' HEIGHT CHAIN LINK MESH, RAILS AND HARDWARE.
- FURNISH AND INSTALL BLACK VINYL FENCE ON THE ENTIRE FIELD FENCE LINE EXCLUDING DUGOUT AND BACKSTOP.
- VERTICAL POST AND HARDWARE TO BE GALV METAL. REUSE MATERIALS AS NEEDED
- FURNISH AND INSTALL ENTIRE FENCE FROM SIDE AND OUTFIELD LINE WITH 5FT HEIGHT.
- REMOVE AND RELOCATED ADVERTISEMENT PANELS IN THE ORDER AS REMOVED REINSTALL TBD BY OWNER'S REP.

BASE BID - NO WORK

6 L-9

ADD ALTERNATE #8

- FURNISH AND INSTALL (YELLOW) FENCE TOP PROTECTION ALONG THE ENTIRE TOP OF FENCE AT 5 FT HEIGHT.

BASE BID - NO WORK

2 L-9

ADD ALTERNATE #5

- REMOVE AND DISPOSE SERVICE GATE MESH FABRIC ONLY.
- FURNISH AND INSTALL 5 FOOT HEIGHT SERVICE GATE WITH 9 GAUGE BLACK VINYL MESH, 180° COMMERCIAL GRADE MANDIBLE HINGE AND HARDWARE.
- FURNISH AND INSTALL DROP BAR.

BASE BID - NO WORK

ADD ALTERNATE #6

- REMOVE AND DISPOSE EXISTING GALVANIZED METAL SLIDING GATE, POST, CONCRETE FOUNDATION AND HARDWARE
- BACKFILL WITH COMMON BORROW.
- LOAM AND SEED DISTURBED AREA

BASE BID - NO WORK

LAYOUT PLAN NOTES

1. ALL LINES AND DIMENSIONS ARE PARALLEL OR PERPENDICULAR TO THE LINES FROM WHICH THEY ARE MEASURED UNLESS OTHERWISE INDICATED.
2. STORAGE AREAS FOR CONTRACTOR'S EQUIPMENT AND MATERIALS SHALL BE ON AND WITHIN LIMITS OF WORK AS SHOWN ON THE PLANS AND AS APPROVED BY THE OWNER'S REPRESENTATIVE.
3. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE FIELD AND REPORT ANY DISCREPANCIES IN THE PLAN TO THE OWNER'S REPRESENTATIVE PRIOR TO STARTING WORK.
4. ALL LAYOUTS SHALL BE ADEQUATELY STAKED BY THE CONTRACTOR AND APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.

LAYOUT PLAN LEGEND

- POINT OF BEGIN
- LOAM AND SEED
- CLAY INFIELD
- LOAM AND SOD
- TREE PROTECTION
- FLAG POLE
- EXISTING FENCE
- PROPOSED FENCE
- LOW — LIMIT OF WORK
- VANISHING LINE

PROVIDENCE PARKS DEPARTMENT
DALRYMPLE BOATHOUSE
ROGER WILLIAMS PARK
PROVIDENCE, RI 02907

NO.	REVISION	DATE
2	ADD ALTERNATES	1/21/21

SITE CONSTRUCTION LAYOUT

NEUTACONKANUT PARK LITTLE LEAGUE FIELD IMPROVEMENTS RE-BID
899 PLAINFIELD STREET PROVIDENCE, RI

FILE: N:\ed\Parks\LLEB_2020_SC_.dwg

DATE: 3/4/21

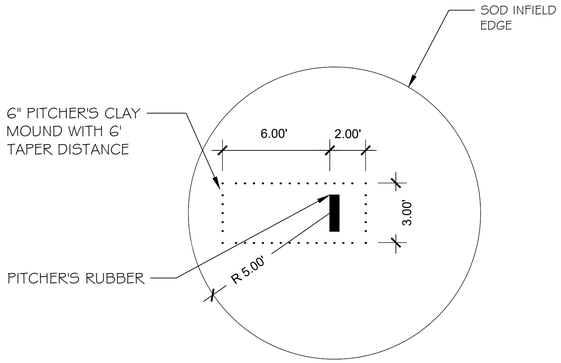
SCALE: 1" = 20'-0"

DRAWN BY: ES

CHECKED/ APPROVED: BB

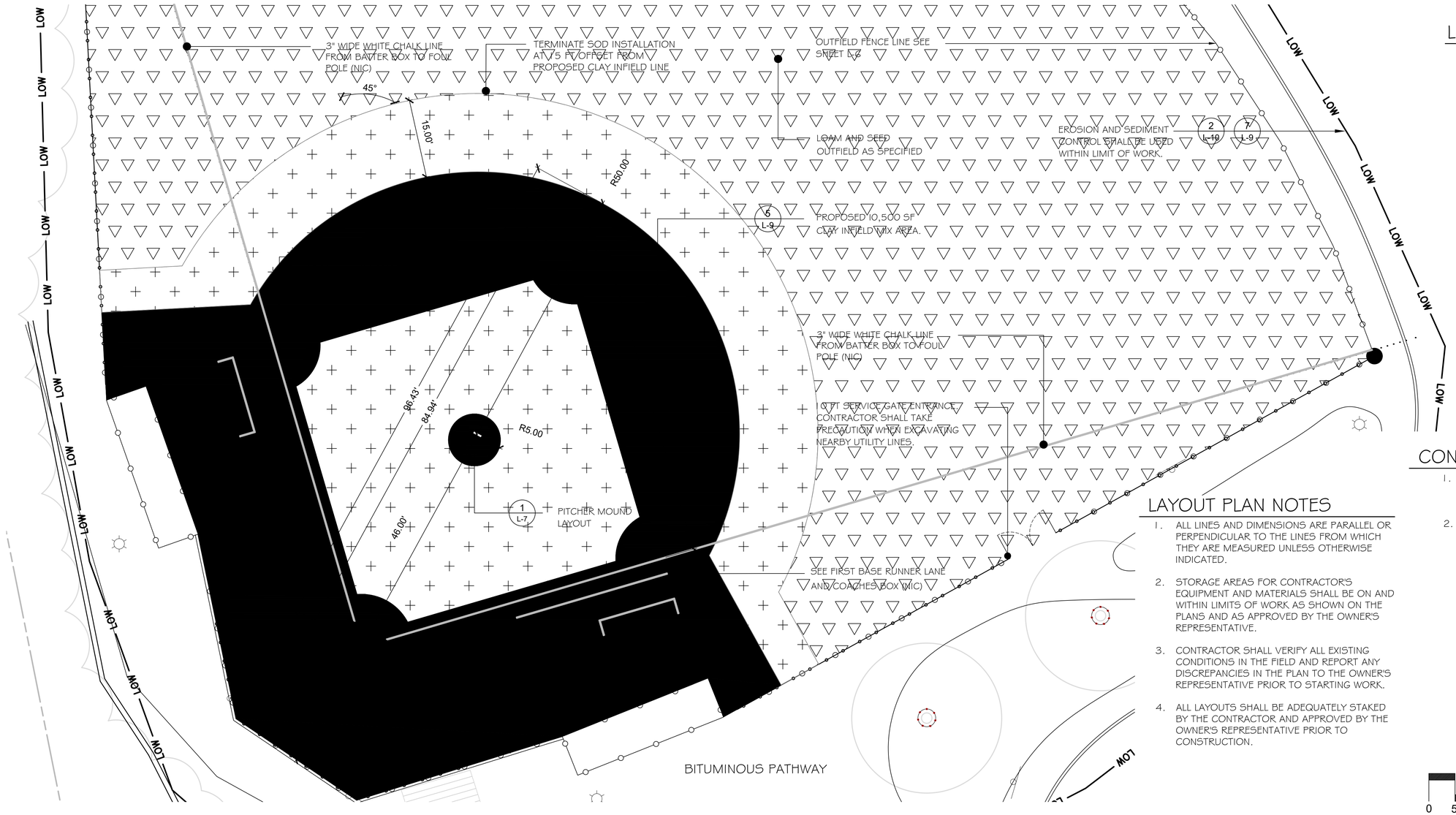
SHEET NO. L-6

OF L-10



1 L-7 LITTLE LEAGUE BASEBALL PITCHER MOUND LAYOUT

(NOT TO SCALE)



LAYOUT PLAN LEGEND

- POINT OF BEGIN
- LOAM AND SEED
- CLAY INFIELD
- SOD AREA
- TREE PROTECTION
- EXISTING FENCE
- PROPOSED FENCE
- LOW — LIMIT OF WORK
- VANISHING LINE

LAYOUT PLAN NOTES

1. ALL LINES AND DIMENSIONS ARE PARALLEL OR PERPENDICULAR TO THE LINES FROM WHICH THEY ARE MEASURED UNLESS OTHERWISE INDICATED.
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3. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE FIELD AND REPORT ANY DISCREPANCIES IN THE PLAN TO THE OWNER'S REPRESENTATIVE PRIOR TO STARTING WORK.
4. ALL LAYOUTS SHALL BE ADEQUATELY STAKED BY THE CONTRACTOR AND APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.

CONSTRUCTION NOTES

1. ALL LANES, CIRCLES AND BOXES SHALL BE LAID OUT PRIOR FOR FINAL APPROVAL.
2. EXISTING INFIELD MIX SHALL BE REMOVED AND STOCKPILED AS DIRECTED BY PARKS DEPARTMENT. CLAY MIX SHALL BE FREE FROM FOREIGN DEBRIS FOR ACCEPTABLE REUSE.

N

0 5' 10' 20

ISSUED FOR BID

PROVIDENCE PARKS DEPARTMENT
DALRYMPLE BOATHOUSE
ROGER WILLIAMS PARK
PROVIDENCE, RI 02907

NO.	REVISION	DATE

LIL LEAGUE INFIELD LAYOUT

NEUTACONKANUT PARK LITTLE LEAGUE FIELD IMPROVEMENTS RE-BID
899 PLAINFIELD STREET PROVIDENCE, RI

FILE: NewParkLLBB_2020_SC_dwg

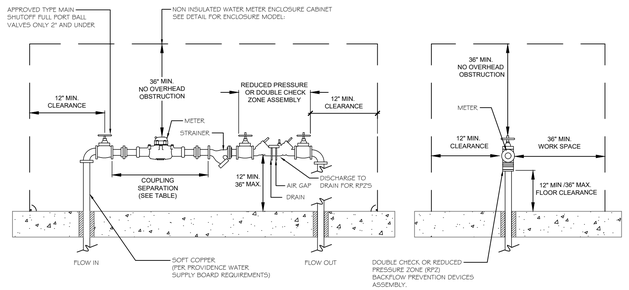
DATE: 3/4/21

SCALE: 1"=10'-0"

DRAWN BY: ES

CHECKED/ APPROVED: BB

SHEET NO. L-7 OF L-10



WATER METER COUPLING SEPARATION TABLE	
WATER METER (INCHES)	COUPLING SEPARATION (FEMALE PIPE THREAD TO FEMALE PIPE THREAD) (INCHES)
5/8	12
3/4	13-5/8
1	16-1/4
1-1/2	22-1/4
2	26-1/4

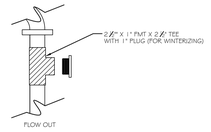
NOTES:

TEST COCK MAY OR MAY NOT BE REQUIRED DEPENDING ON TYPE OF METER.

BOXING IN METER AND BACKFLOW ASSEMBLY NOT ALLOWED. MUST BE ACCESSIBLE AT ALL TIMES.

CONTRACTOR SHALL CARRY ALL COST FOR FEES AND CHARGES BY PROVIDENCE WATER SUPPLY BOARD.

COST ASSOCIATED WITH TRAFFIC CONTROL SHALL BE PAID FOR BY THE CONTRACTOR.

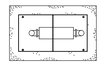


1 L-8 BACKFLOW AND METER DETAIL

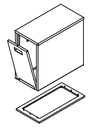
(NOT TO SCALE)

NeutParkLLBB_2020_DT.dwg

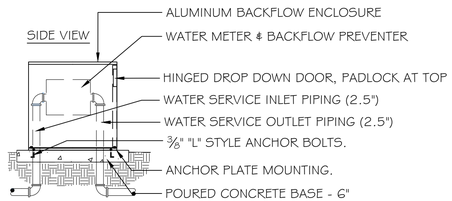
STRONGBOX
ALUMINUM LOW PROFILE



TOP VIEW



ISO VIEW



NOTES

- BACKFLOW ANCHOR BASE.
- MOUNTING BASE SECURED IN CONCRETE WITH 3/8" J BOLTS (4 PLACES)
- EXISTING CONCRETE CORNERS WILL NEED TO 3/8"X3" REDHEAD ANCHORS.

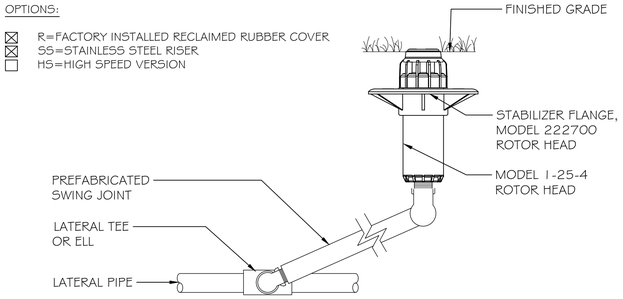
2 L-8 ALLUMINIUM BACKFLOW ENCLOSURE CABINET

(NOT TO SCALE)

NeutParkLLBB_2020_DT.dwg

OPTIONS:

- ☒ R=FACTORY INSTALLED RECLAIMED RUBBER COVER
- ☒ SS=STAINLESS STEEL RISER
- ☐ HS=HIGH SPEED VERSION



NOTE:

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.
3. ALL DIMENSIONS ARE CONSIDERED TRUE AND REFLECT MANUFACTURER'S SPECIFICATIONS.
4. FOR PRODUCT AND COMPANY INFORMATION VISIT WWW.HUNTERINDUSTRIES.COM

3 L-8 HUNTER ROTOR HEAD 1-25-4 DETAIL

(NOT TO SCALE)

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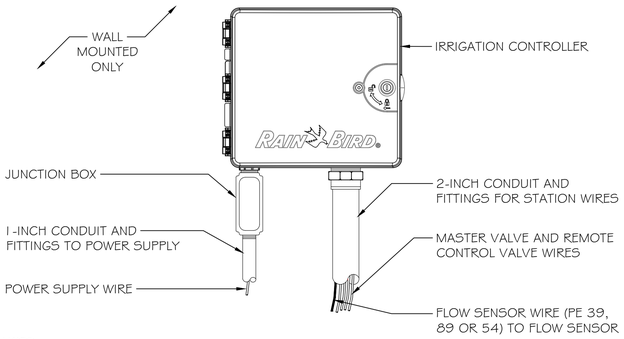

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3. FOR PRODUCT AND COMPANY INFORMATION VISIT WWW.RAINBIRD.COM

4 L-8 IRRIGATION CONTROLLER DETAIL

(NOT TO SCALE)

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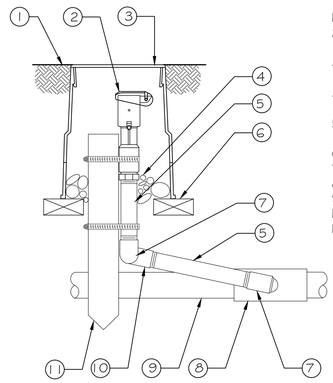


1. FINISH GRADE/TOP OF MULCH
2. QUICK-COUPLING VALVE: RAINBIRD MODEL 44LRC
3. VALVE BOX WITH COVER: RAINBIRD VB-GRND- LOCKABLE OPTION
4. 3 -INCH MINIMUM DEPTH OF 3/4 -INCH WASHED GRAVEL
5. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
6. BRICK (1OF2)
7. PVC SCH 40 STREET ELL
8. PVC SCH 40 TEE OR ELL
9. PVC MAINLINE PIPE
10. PVC SCH40 ELL
11. 2"X2" REDWOOD STAKE WITH STAINLESS STEEL GEAR CLAMPS OR EQUIVALENT SUPPORT SYSTEM

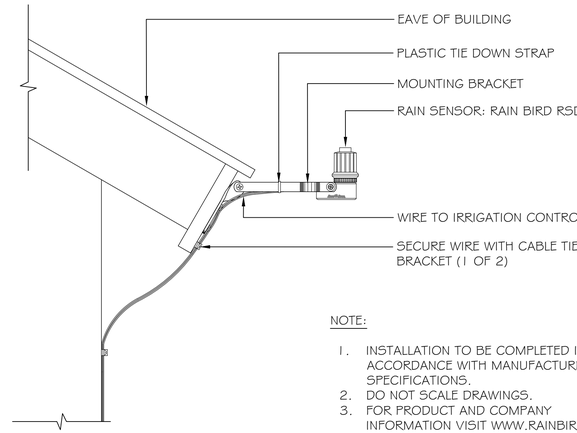
NOTE:

FURNISH FITTING AND PIPING NORMALLY SIZED IDENTICAL TO NORMAL QUICK COUPLING VALVE INLET SIZE.

5 L-8 RAINBIRD COUPLING VALVE DETAIL

(NOT TO SCALE)

NeutParkLLBB_2020_DT.dwg



NOTE:

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3. FOR PRODUCT AND COMPANY INFORMATION VISIT WWW.RAINBIRD.COM

6 L-8 RAINBIRD SENSOR DETAIL

(NOT TO SCALE)

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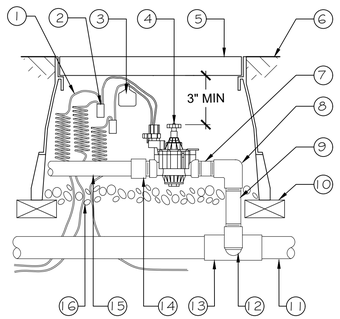

1. 30-INCH LINEAR LENGTH OF WIRE, COILED
2. WATERPROOF CONNECTION: RAIN BIRD SPLICE- I (1 OF 2)
3. ID TAG: RAIN BIRD VID SERIES
4. REMOTE CONTROL VALVE: RAIN BIRD PGA
5. VALVE BOX WITH COVER: RAIN BIRD VB-STD
6. FINISH GRADE/TOP OF MULCH
7. PVC SCH 80 NIPPLE (CLOSED)
8. PVC SCH 40 ELL
9. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
10. BRICK (1 OF 4)
11. PVC MAINLINE PIPE
12. SCH 80 NIPPLE (2 INCH LENGTH, HIDDEN) AND SCH 40 ELL
13. PVC SCH 40 TEE OR ELL
14. PVC SCH 40 MALE ADAPTER
15. PVC LATERAL PIPE
16. 3.0-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL

NOTE:

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7 L-8 REMOTE CONTROL VALVE DETAIL

(NOT TO SCALE)

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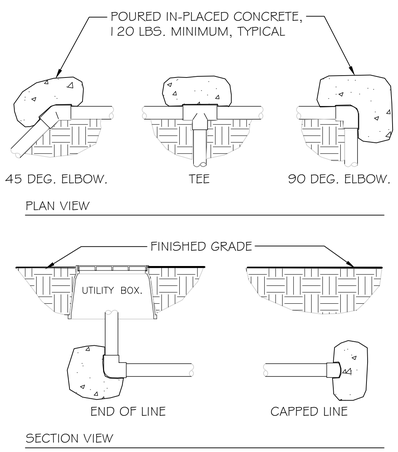

8 L-8 THRUST BLOCKING (6J) PIPE LINE DETAIL

(NOT TO SCALE)

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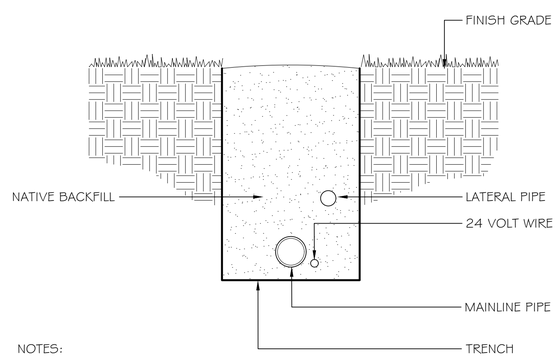


NOTES:

1. TAPE WIRE AT 12' INTERVALS
2. TIE LOSE LOOP OF WIRE AT CHANGES OF DIRECTION

9 L-8 MAIN LINE DETAIL

(NOT TO SCALE)

NeutParkLLBB_2020_DT.dwg

PROVIDENCE PARKS DEPARTMENT
DALRYMPLE BOATHOUSE
ROGER WILLIAMS PARK
PROVIDENCE, RI 02907

NO.	REVISION	DATE
2	ADD#2	1/21/21

DETAIL SHEET 1

NEUTACONKANUT PARK LITTLE LEAGUE FIELD IMPROVEMENTS RE-BID
899 PLAINFIELD STREET PROVIDENCE, RI

FILE: NeutParkLLBB_2020_DT.dwg

DATE: 3/4/21

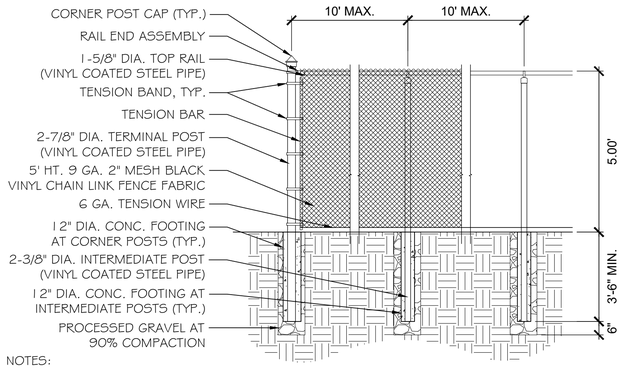
SCALE:

DRAWN BY: ES

CHECKED/ APPROVED: BB

SHEET NO. L-8 OF L-10

ISSUED FOR BID



NOTES:

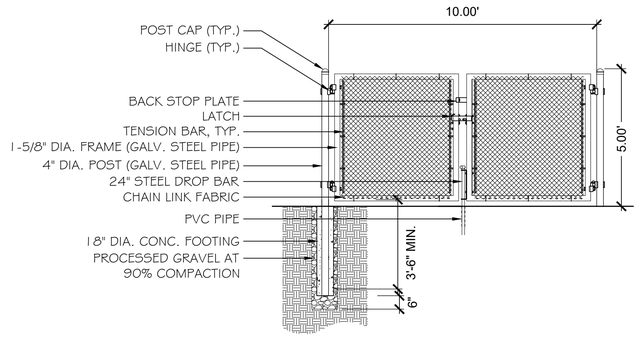
FENCING TO BE TIED TO TOP RAILS & LINE POSTS W/ 9GA. WIRE SPACED AT 12"

BRACE ALL CORNERS & TERMINAL POSTS W/ BLACK VINYL COATED STEEL PIPE TYPE 1: ASTM F 1083 AND APPROPRIATE FASTENERS SEE SPECIFICATION SECTION 323113

ALL FENCE ELEMENTS SHALL BE OF BLACK VINYL COATED STEEL CONSTRUCTION

1 L-9 **BLACK VINYL FENCE DETAIL**

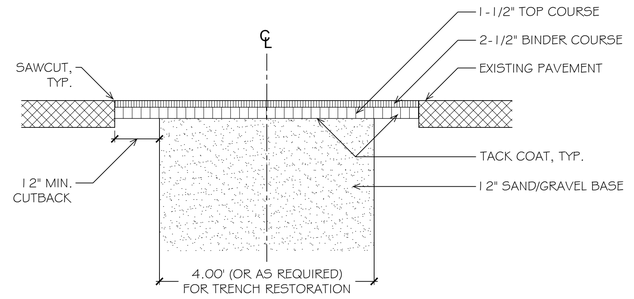
(NOT TO SCALE)



2 L-9 **BLACK VINYL DOUBLE GATE DETAIL**

(NOT TO SCALE)

NeutParkLLBB_2020_DT.dwg



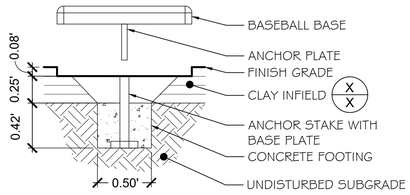
NOTES:

1. DISTURBED AREAS SHALL NOT EXTEND BEYOND THE SAWCUT.
2. ALL BITUMINOUS CONCRETE SHALL BE MHD TYPE 1-1.
3. THIS DETAIL SHALL BE USED FOR PAVEMENT RESTORATION AT ALL TRENCHES WITH BITUMINOUS PAVEMENT.

3 L-9 **BITUMINOUS SAWCUT DEATIL**

(NOT TO SCALE)

NeutParkLLBB_2020_DT.dwg



CONSTRUCTION NOTES:

1. DETAIL DOES NOT APPLY TO HOME PLATE.
2. CONCRETE ANCHOR FOOTING SHALL HAVE MIN. 24 HOURS FOR CURING PROCESS PRIOR TO INSTALLING ANCHOR STAKE & BASE.
3. BASEBALL DIAMOND TO BE LEVEL BEFORE EXCAVATING FOOTING LOCATION.
4. EXCAVATE FOOTING LOCATION MIN. DEPTH 9" FROM GROUND LEVEL. TOP EDGE OF THE ANCHOR STAKE SHALL BE MIN 1" BELOW FINISH GRADE LEVEL. ANCHOR STAKE SHALL BE PERPENDICULAR TO LEVEL GROUND.
5. FILL IN THE HOLE BY TAMPING SOIL SOLIDLY AROUND ANCHOR STAKE FOOTING. ALLOW AN AREA THE SIZE OF THE BASE TO BE 1" BELOW THE GROUND LEVEL. POSITION BASE OVER FOOTING, INSTALL INTO PLACE WITH ANCHOR STAKE SLIDING INTO ANCHOR PLATE ON THE BACKSIDE OF BASE. THE TOP OF THE BASE PLATE SHALL BE 2" HIGHER THAN THE LEVEL GRADE.

4 L-9 **BASE PLATE DETAIL**

(NOT TO SCALE)

NeutParkLLBB_2020_DT.dwg

INFIELD SKIN SURFACE:

- 4" FINAL COMPACTED DEPTH PLACE PRODUCT IN 2 TO 3" LIFTS
- SCARIFY THE SURFACE BETWEEN LIFTS TO FACILITATE BONDING OF THE NEXT LIFT AND REPEAT UNTIL FINISH GRADE ELEVATION IS ACHIEVED
- ACHIEVE 85% TO 90% COMPACTION BASED ON A STANDARD PROCTOR TEST (ASTM D 689-07)
- 1/2" TO 1% SLOPE ON FINAL GRADE

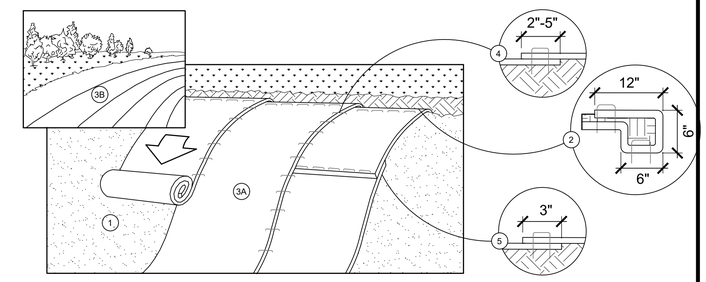
NOTES

1. SAND: 70% TO 75% OF THE TOTAL SAND CONTENT, 50% SHALL BE COMPOSED OF MEDIUM, COARSE, AND VERY COARSE SAND PARTICLES.
2. SILT & CLAY: THE COMBINED AMOUNT OF SILT AND CLAY SHALL BE BETWEEN 25% AND 30%. THE SILT-TO-CLAY RATIO. SHALL BE BETWEEN 0.5 AND 1.0.

5 L-9 **CLAY INFIELD DETAIL**

(NOT TO SCALE)

NeutParkLLBB_2020_DT.dwg



SLOPE INSTALLATION

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/ STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.

NOTES:

a. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
b. IN LOOSE SOIL CONDITIONS THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (150M) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

8 L-9 **EROSION BLANKET DETAIL**

(NOT TO SCALE)

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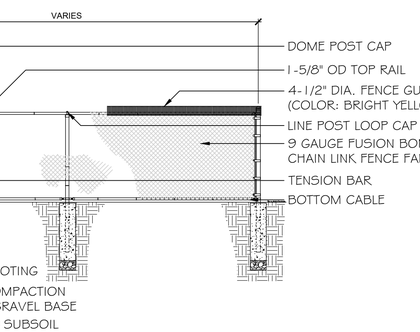

6 L-9 **FENCE TOP PROTECTION DETAIL**

(NOT TO SCALE)

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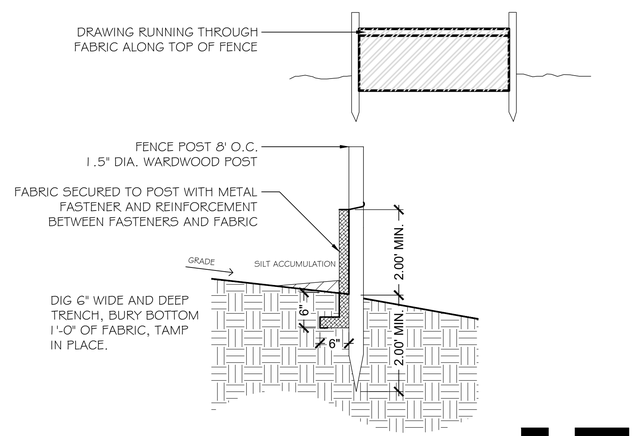

7 L-9 **SILT FENCE DETAIL**

(NOT TO SCALE)

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NOT TO SCALE

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PROVIDENCE PARKS DEPARTMENT

DALRYMPLE BOATHOUSE
ROGER WILLIAMS PARK
PROVIDENCE, RI 02907

NO.	REVISION	DATE

DETAIL SHEET 2

NEUTACONKANUT PARK LITTLE LEAGUE FIELD IMPROVEMENTS RE-BID
899 PLAINFIELD STREET PROVIDENCE, RI

FILE: NeutParkLLBB_2020_DT.dwg

DATE: 3/4/21

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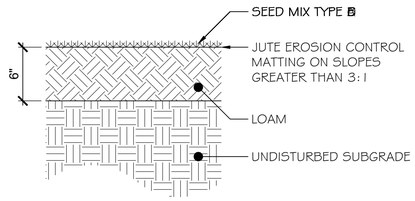
SHEET NO. L-9

OF L-10



1 L-10 LOAM AND SEED DETAIL

(NOT TO SCALE)

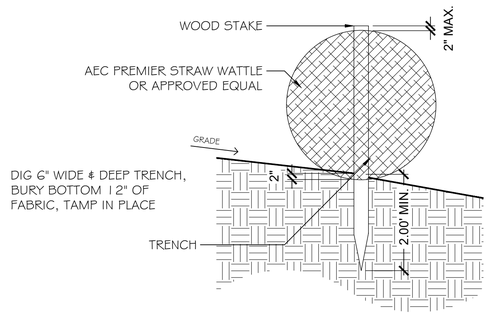
NeutParkLLBB_2020_DT.dwg

WATTLES ARE INSTALLED PERPENDICULAR TO THE SLOPE OR DIRECTION OF FLOW.

WOOD STAKE PLACED WITHIN 2' OF END OF WATTLE, THEN ANOTHER 2' AND THEN CONTINUOUSLY 4' O.C.

WHEN JOINING TWO WATTLES, TIGHTLY ABUT BOTH ENDS, TIE THE ENDS TOGETHER USING HEAVY TWINE OR PLASTIC LOCKING TIES.

LAST 2' OF WATTLES SHALL BE TURNED UPHILL



2 L-10 SILT SOCK DETAIL

(NOT TO SCALE)

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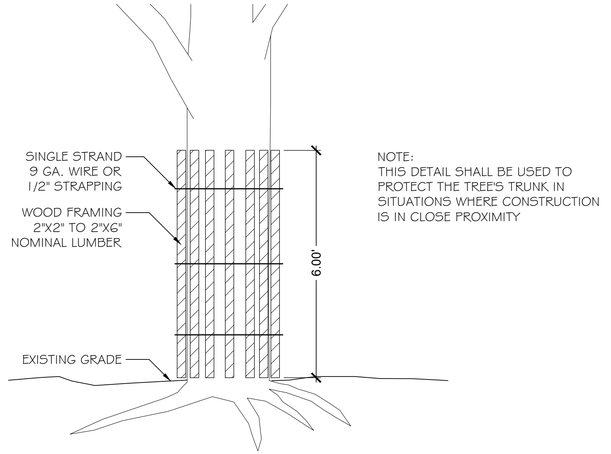

NOTE:
THIS DETAIL SHALL BE USED TO PROTECT THE TREE'S TRUNK IN SITUATIONS WHERE CONSTRUCTION IS IN CLOSE PROXIMITY

3 L-10 TREE PROTECTION DETAIL

(NOT TO SCALE)

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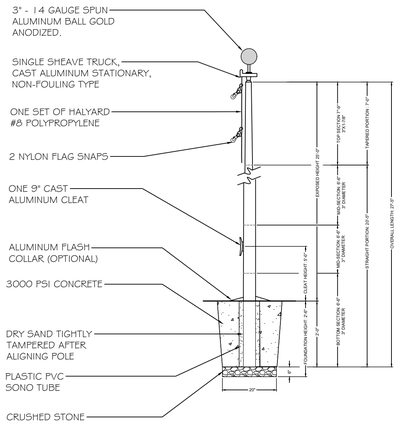

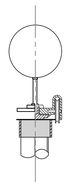

NOTES:

EXPOSED HEIGHT: 25'
BUTT DIAMETER: 3"
TOP DIAMETER: 1-7/8"
WALL THICKNESS: .125"
FINISH: 100 GRIT POLISH
MANUFACTURE BY: ELDER FLAG OR APPROVED EQUAL

4 L-10 FLAG POST DETAIL

(NOT TO SCALE)

NeutParkLLBB_2020_DT.dwg

NO.	REVISION	DATE

PROVIDENCE PARKS DEPARTMENT

DALRYMPLE BOATHOUSE
ROGER WILLIAMS PARK
PROVIDENCE, RI 02907

DETAIL SHEET 3

NEUTACONKANUT PARK LITTLE LEAGUE FIELD IMPROVEMENTS RE-BID

899 PLAINFIELD STREET PROVIDENCE, RI

FILE: NeutParkLLBB_2020_DT.dwg

DATE: 3/4/21

SCALE:

DRAWN BY: ES

CHECKED/ APPROVED: BB

SHEET NO. L-10 OF L-10

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