Pontiac Village Park Site Improvements Bid No. 2023-395



Honorable Frank J. Picozzi Mayor

Bidding Requirements, Bond Forms, Contract Agreement, Conditions of the Contract and Technical Specifications



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INVITATION TO BID CITY OF WARWICK, RHODE ISLAND

Notice is hereby given that the City of Warwick Will be accepted bids for the construction of

BID# 2023-395

PONTIAC VILLAGE PARK SITE IMPROVEMENTS

The City of Warwick, Rhode Island will accept sealed bids for "Pontiac Village Park Site Improvements" at the City of Warwick Purchasing Department located at Warwick City Hall Annex, 65 Centerville Road, 1st Floor Suite D, Warwick, RI 02886 until no later than 11:00 AM on Monday, April 10, 2023.

Bidding Documents and Contract Specifications will be posted on the City's website at www.warwickri.gov/bids and the RI State Purchasing website at www.purchasing.ri.gov.

A mandatory Pre-Bid Conference will be held on Tuesday, March 28, 2023 at 10:00 AM onsite at the Pontiac Village Playground located at 145 Greenwich Avenue, Warwick, Rhode Island. Participants will be asked to sign in and provide an email address as a project contact.

Requests for Information will be due by **Tuesday, April 4, 2023 by 3:00 PM.** Requests for information or clarification must be made in writing to William Facente, Housing & Community Development Manager, <u>william.r.facente@warwickri.gov.</u>

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Francis M. Gomez Frank J. Picozzi

Purchasing Agent Mayor

City of Warwick

Purchasing Division (Mailing Address) 3275 Post Road Warwick, Rhode Island 02886 Tel (401) 738-2013 Fax (401) 737-2364

The following notice is to appear on the City of Warwick's website Monday, March 13, 2023. The website address is http://www.warwickri.gov/bids.

CITY OF WARWICK BIDS REQUESTED FOR

Bid2023-395 Pontiac Village Park Site Improvements

Specifications

Specifications are available in the Purchasing Division, located at 65 Centerville Road, Monday through Friday, 8:30 AM until 4:30 PM on or after Monday, March 13, 2023.

Pre-Bid Conference

There will be a mandatory pre-bid conference on Tuesday, March 28, 2023 at 10:00am at the Pontiac Village Park, located at 145 Greenwich Ave., Warwick, RI 02888.

Submissions

Sealed bids will be received by the Purchasing Division no later than 11:00 AM, Monday, April 10, 2023. The bids will be opened publicly commencing at 11:00 AM on the same day at 65 Centerville Road, Warwick, RI 02886, Meeting Room 2.

Delivery

All bids must be sealed. If delivering in person or sent by delivery service (FedEx/UPS/DHL etc.) use physical address 65 Centerville Road, Warwick, RI 02886, Suite D. If sent via United States Postage Service use mailing address 3275 Post Road Warwick, Rhode Island 02886.

Awards

Awards will be made on the basis of the lowest evaluated or responsive bid price. Please note that no bids can be accepted via email or fax.

Individuals requesting interpreter services for the hearing impaired must notify the Purchasing Division at 401-738-2013 at least 48 hours in advance of the bid opening date.

Francis M. Gomez Purchasing Agent

PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR BID

Acknowledgement of Addendum (if applicable)

| | Addendum Number | Signature of Bidder | |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| | | | _ |
| | | | _ |
| COMPANY N | JAME: | | _ |
| COMPANY A | ADDRESS: | | _ |
| COMPANY A | ADDRESS: | | _ |
| BIDDER'S SI | GNATURE: | | |
| BIDDER'S NA | AME (PRINT): | | |
| TITLE: | TEL. NO |).: | - |
| EMAIL ADD | RESS: | | * |
| • | our email address. Future bio | , | |
| II. AWARD AN | D CONTRACT: | | |
| Agent/Finance Deep enters into a control or receipt of the g | The CITY OF WARWICK, as irector/Mayor (delete if inapperact with the above party to pagoods unless another payment pecifications, both substantive | licable), accepts the above ay the bid price upon comp schedule is contained in the | e bid and hereby pletion of the project he specifications. |
| | | | |
| | | | |
| DATE: | | | |
| DATE: | Bid2023-395 | Purchasing Agent | |

PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR BID

CERTIFICATION & WARRANT FORM*

This form <u>must</u> be completed and submitted with sealed bid. Failure to do so will result in automatic rejection.

Any and all bids shall contain a certification and warrant that they comply with all relevant and pertinent statues, laws, ordinances and regulations, in particular, but not limited to Chapter 16-Conflicts of Interest, of the Code of Ordinances of the City of Warwick. Any proven violation of this warranty and representation by a bidder at the time of the bid or during the course of the contract, included, but not limited to negligent acts, either directly or indirectly through agents and/or sub-contractors, shall render the bidder's contract terminated and the bidder shall be required to reimburse the City for any and all costs incurred by the City, including reasonable attorney fees, to prosecute and/or enforce this provision.

| Signature | Date |
|--------------|------|
| Company Name | |
| Address | |
| Address | |

*This form cannot be altered

CITY OF WARWICK NOTICE TO BIDDERS

Bid2023-395 Pontiac Village Site Improvements

If you received this document from our homepage or from a source other than the City of Warwick Purchasing Division, please check with our office prior to submitting your bid to ensure that you have a complete package. The Purchasing Division cannot be responsible to provide addenda if we do not have you on record as a plan holder.

The opening of bids will be in the order established by the posted agenda and the agenda will continue uninterrupted until completion.

Once an item has been reached and any bids on that item has been opened, no other bids on that item will be accepted and any such bid will be deemed late.

The contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap for any position for which the employee or applicant is qualified and that in the event of non-compliance the City may declare the contractor in breach and take any necessary legal recourse including termination or cancellation of the contract.

A bidder filing a bid thereby certifies that no officer, agent, or employee of the City has a pecuniary interest in the bid or has participated in contract negotiations on the part of the City, that the bid is made in good faith without fraud, collusion, or connection of any kind with any other bidder for the same call for bids, and that the bidder is competing solely in his own behalf without connection with, or obligation to, any undisclosed person or firm.

All bids should be submitted with one (1) original and one (1) copy in a sealed envelope, which should read: *YOUR COMPANY NAME* plainly marked on the exterior of the envelope as well as "Bid2023-395 Pontiac Village Site improvements."

Bids received prior to the time of the opening will be securely kept, unopened. No responsibility will be attached to an officer or person for the premature opening of a bid not properly addressed and identified. No bids will be accepted via facsimile or email.

Should you have any questions, please contact William Facente, Office of Housing and Community Development, at 401-921-9688.

All bids should be written in ink or typed. If there is a correction with whiteout, the bidder must initial the change.

Negligence on the part of the bidder in preparing the proposal confers no rights for the withdrawal of the proposal after it is open.

Any deviation from the specifications must be noted in writing and attached as part of the bid proposal. The bidder must indicate the item or part with the deviation and

indicate how the bid will deviate from specifications.

The IRS Form W-9 available on www.warwickri.gov should be completed and submitted with the bid if the bidder falls under IRS requirements to file this form.

The successful bidder must comply with all Rhode Island Labor Laws, Chapter 37-12-13, and all other applicable Local, State and Federal Laws.

Prevailing Wages will apply to this bid. Current rates may be viewed at http://www.dlt.state.ri.us/pw.

The successful bidder must comply with all Rhode Island Laws, applicable to public works projects, including, but not limited to provisions of Chapter 13 of Title 37 of the Rhode Island General Laws, pertaining to prevailing wage rates, and all other applicable local, state and federal laws.

The contractor must carry sufficient liability insurance and agree to indemnify the city against all claims of any nature, which might arise as a result of his operations or conduct of work.

The contractor shall keep himself informed of and comply with all laws, ordinances and regulations of the federal, state and municipal governments which may apply and be in force during the life of the contract, in any manner which may affect himself/employees or the conduct of the work or the materials used or employed in the work. Before submitting bids, prospective bidders shall examine the terms, covenants and conditions of all codes, permits and laws which may apply. By submitting a bid, the bidder agrees to comply with all pertinent laws/regulations if awarded a contract.

Every contractor and subcontractor awarded a contract for public works, construction, alteration and/or repair, including painting and decorating, or public buildings or public works must submit completed RI Certified Weekly Payroll forms listing employees employed on the project to the awarding authority on a monthly basis for all work completed in the preceding month. These forms may be found at:

www.dlt.ri.gov/pw/pwFormsPubs.htm. Certified Payroll forms concerning RI Department of Transportation projects may be submitted on federal forms. However, when a complaint is being investigated by the RI Department of Labor & Training (DLT), the contractor must resubmit the payroll information on the RI Certified Weekly Payroll forms for the entire project.

Awarding authorities, contractors and subcontractors shall provide any and all payroll records to the DLT within ten (10) days of any request that is made by the department.

The awarding authority of any public works project shall withhold the next scheduled payment to any contractor or subcontractor who fails to comply with the above provisions, as well as any further payments until they comply. The DLT may also impose a penalty of up to \$500 for each calendar day of noncompliance.

Please refer to Rhode Island state laws Section 37-13 for more information.

The successful bidder must provide the City of Warwick with an original **Certificate of Insurance** for General and Automobile Liability in a minimum amount of \$1 million, naming the <u>City of Warwick as the additional insured</u> and so stated on the certificate with the bid name and bid number. It is the vendor's responsibility to provide the City of Warwick with an updated Certificate of Insurance upon expiration of the original certificate.

For a bid to be awarded to a corporation, limited liability company or other legal entity, prior to commencing work under the awarded bid, that corporation, company or legal entity may be required to provide to the Purchasing Agent a **Certificate of Good Standing** dated no more than thirty (30) days prior to the date upon which the bid approval was made.

The successful bidder will provide said **Certificate of Insurance** and **Certificate of Good Standing** within ten (10) calendar days after notification or the City reserves the right to rescind said award.

Prices to be held firm one (1) year from date of award. Term contracts may be extended for one (1) additional term upon mutual agreement unless otherwise stated.

The City is exempt from the payment of the Rhode Island Sales Tax under the 1956 General Laws of the State of Rhode Island, 44-18-30, Paragraph I, as amended.

The Purchasing Agent reserves the right to reject any and all bids, to waive any minor deviations or informalities in the bids received, and to accept the bid deemed most favorable to the interest of the City.

The City reserves the right to terminate the contract or any part of the contract in the best interests of the City, upon 30-day notice to the contractor. The City will incur no liability for materials or services not yet ordered if it terminates in the best interests of the City. If the City terminates in the interests of the City after an order for materials or services have been placed, the contractor will be entitled to compensation upon submission of invoices and proper proof of claim, in that proportion which its services and products were satisfactorily rendered or provided, as well as expenses necessarily incurred in the performance of work up to time of termination.

No extra charges for delivery, handling or other services will be honored. All claims for damage in transit will be the responsibility of the successful bidder. Deliveries must be made during normal working hours unless otherwise agreed upon.

All costs directly or indirectly related to the preparation of a response to this solicitation, or any presentation or communication to supplement and/or clarify any response to this solicitation which may be required or requested by the City of Warwick will be the sole responsibility of and will be borne by the respondent.

If the respondent is awarded a contract in accordance with this solicitation and if the respondent fails or refuses to satisfy fully all of the respondents obligations thereunder, the City of Warwick will be entitled to recover from the respondent any losses, damages or costs incurred by the City as a result of such failure or refusal.

The City reserves the right to award in part or full and to increase or decrease quantities in the best interest of the City.

Any quantity reference in the bid specifications are estimates only, and do not represent a commitment on the part of the City of Warwick to any level of billing activity. It is understood and agreed that the agreement will cover the actual quantities ordered during the contract period.

The City reserves the right to rescind award for non-compliance to bid specifications.

The successful bidder must adhere to all City, State and Federal Laws, where applicable.

PLEASE COMPLETE THIS PAGE & SUBMIT WITH YOUR BID

(PRICING SHEET MAY <u>NOT</u> BE CONFIDENTIAL)

CITY OF WARWICK

BID AND CONTRACT FORM

TITLE OF SPECIFICATION: Bid2023-395 Pontiac Village Park Site Improvements

I. BID:

WHEREAS, the CITY OF WARWICK has duly asked for bids for performance of services and/or supply of goods in accordance with the above-indicated specifications.

The person or entity does irrevocably offer to perform the services and/or furnish the goods in accordance with the specifications, which are hereby incorporated by reference in exchange for the bid price.

This offer will remain open and irrevocable until the CITY OF WARWICK has accepted this bid or another bid on the specifications or abandoned the project.

The bidder agrees that acceptance by the CITY OF WARWICK will transform the bid into a contract. This bid and contract will be secured by Bonds, if required by the specifications.

Pricing as Submitted

SECTION 00200

INFORMATION FOR BIDDERS

| 1.01 | Receipt and Opening of Bids |
|------|------------------------------------------------|
| 1.02 | Location and Work to be Done |
| 1.03 | Contract Documents |
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| 1.06 | Bidders to Investigate |
| 1.07 | Information Not Guaranteed |
| 1.08 | Conditions of Work |
| 1.09 | Blank Form for Bid |
| 1.10 | Withdrawal of Bids |
| 1.11 | Interested Parties to Contract |
| 1.12 | Ability and Experience of Bidder |
| 1.13 | Bids |
| 1.14 | Comparison of Bids |
| 1.15 | Reduction in Scope of Work |
| 1.16 | Contract Bonds |
| 1.17 | Power of Attorney |
| 1.18 | Execution of Agreement |
| 1.19 | Insurance Certificates |
| 1.20 | Time for Completion and Liquidated Damages |
| 1.21 | Laws and Regulations |
| 1.22 | Work on State, Municipal, and Private Property |
| 1.23 | Datum or Levels |
| 1.24 | State Sales and Use Tax |
| 1.25 | Manufacturer's Experience |
| 1.26 | Protection of Lives and Health |
| 1.27 | Nondiscrimination in Employment |
| 1.28 | Sequence of Operations |
| 1.29 | American Iron and Steel Requirements |
| | |

1.01 RECEIPT AND OPENING OF BIDS

A. The City of Warwick, Rhode Island, herein called the Owner, invites sealed bids for "Pontiac Village Park Site Improvements, Bid# 2023-395", in accordance with the Contract Documents prepared by Owner.

B. Such Bids, submitted in sealed envelopes plainly marked in the upper left hand corner with the Bidder's name and address, plainly marked in the lower left hand corner with the date and time of opening;

Addressed to: City of Warwick, Rhode Island

Purchasing Division

65 Centerville Road, Suite D, Warwick, Rhode Island 02886

Endorsed: Bid# 2023-395

Pontiac Village Park Site Improvements

Delivered by: 11:00 AM on Monday April 10, 2023

Said Bids will be publicly opened and read aloud at that time.

- C. The Owner may consider informal, any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities in or reject any and all Bids. Conditional or qualified Bids will not be accepted. Any Bid received after the time and date specified shall not be considered. Should there be reasons why the Contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the Owner and the Bidder.
- D. All bids shall comply with the provisions of RIGL §37-2-18 which provides as follows:

§ 37-2-18. Competitive sealed bidding

the lowest evaluated bid price; and

- (a) Contracts exceeding the amount provided by § 37-2-22 shall be awarded by competitive sealed bidding unless it is determined in writing that this method is not practicable or that the best value for the state may be obtained by using an electronic reverse auction as set forth in § 37-2-18.1. Factors to be considered in determining whether competitive sealed bidding is practicable shall include whether:
- (1) Specifications can be prepared that permit award on the basis of either the lowest bid price or
- (2) The available sources, the time and place of performance, and other relevant circumstances as are appropriate for the use of competitive sealed bidding.
- (b) The invitation for bids shall state whether the award shall be made on the basis of the lowest bid price or the lowest evaluated or responsive bid price. If the latter basis is used, the objective measurable criteria to be utilized shall be set forth in the invitation for bids, if available. All documents submitted in response to the bid proposal are public pursuant to chapter 38-2 upon opening of the bids. The invitation for bids shall state that each bidder must submit a copy of their bid proposal to be available for public inspection upon the opening of the bids. The burden to identify and withhold from the public copy that is released at the bid opening any trade secrets, commercial or financial information, or other information the bidder deems not subject to public disclosure pursuant to chapter 38-2, the Access to Public Records Act, shall rest with the bidder submitting the bid proposal.

- (c) Unless the invitations for bid are accessible under the provisions as provided in § 37-2-17.1, public notice of the invitation for bids shall be given a sufficient time prior to the date set forth therein for the opening of bids. Public notice may include publication in a newspaper of general circulation in the state as determined by the purchasing agent not less than seven (7) days nor more than twenty-eight (28) days before the date set for the opening of the bids. The purchasing agent may make a written determination that the twenty-eight (28) day limitation needs to be waived. The written determination shall state the reason why the twenty-eight (28) day limitation is being waived and shall state the number of days, giving a minimum and maximum, before the date set for the opening of bids when public notice is to be given.
- (d) Bids shall be opened and read aloud publicly at the time and place designated in the invitation for bids. Each bid, together with the name of the bidder, shall be recorded and an abstract made available for public inspection.
- (e) The chief purchasing officer shall adopt and file regulations governing the bidding of highway and bridge construction projects in the state not later than December 31, 2011.
- (f) Immediately subsequent to the opening of the bids, the copies of bid documents submitted pursuant to subsection 37-2-18(b) shall be made available for inspection by the public. Any objection to any bid on the grounds that it is nonresponsive to the invitation for bids must be filed with the purchasing agent within five (5) business days of the opening of the bids. The purchasing agent shall issue a written determination as to whether the subject bid is nonresponsive addressing each assertion in the objection and shall provide a copy of the determination to the objector and all those who submitted bids at least seven (7) business days prior to the award of the contract. If a bid is nonresponsive to the requirements in the invitation to bid, the bid is invalid, and the purchasing agent shall reject the bid. The purchasing agent shall have no discretion to waive any requirements in the invitation to bid which are identified as mandatory. Nothing in this section shall be construed to interfere with or invalidate the results of the due diligence conducted by the division of purchasing to determine whether bids are responsive and responsible.
- (g) Subsequent to the awarding of the bid, all documents pertinent to the awarding of the bid that were not made public pursuant to subsection 37-2-18(e) shall be made available and open to public inspection, pursuant to chapter 38-2, the Access to Public Records Act, and retained in the bid file. The copy of the bid proposal provided pursuant to subsection 37-2-18(b) shall be retained until the bid is awarded.
- (h) The contract shall be awarded with reasonable promptness by written notice to the responsive and responsible bidder whose bid is either the lowest bid price, lowest evaluated, or responsive bid price.
- (i) Correction or withdrawal of bids may be allowed only to the extent permitted by regulations issued by the chief purchasing officer.
- (j) As of January 1, 2011, this section shall apply to contracts greater than one million dollars (\$1,000,000); on January 1, 2012 for all contracts greater than seven hundred fifty thousand dollars (\$750,000); on January 1, 2013 for all contracts greater than five hundred thousand dollars (\$500,000); and on January 1, 2014 for all contracts awarded pursuant to this section.

1.02 LOCATION AND WORK TO BE DONE

- A. The location, general characteristics, and principal details of the Work are indicated in a set of drawings, entitled "Pontiac Village Park Site Improvements, Bid# 2023-395".
- B. Details and Schedules bound in the Appendices, and the Drawings listed above are the Contract Drawings, sometimes referred to herein as the "Drawings".
- C. Additional drawings showing details in accordance with which the Work is to be done will be furnished from time to time by the Engineer, if found necessary, and shall then become part of the Drawings.
- D. The Contractor shall furnish all labor, services, materials, equipment, plant machinery, apparatus, appliances, tools, supplies and all other things necessary to perform all work required for the completion of each item of the Work and as herein specified.
- E. The Work to be done and paid for under any item shall not be limited to the exact extent mentioned or described but shall include all incidental work necessary or customarily done for the completion of that item.

1.03 CONTRACT DOCUMENTS

A. The Contract Documents, INFORMATION FOR BIDDERS, SPECIFICATIONS, and forms for BID, AGREEMENT, and BONDS, may be examined and obtained at the locations designated in the "Notice to Bidders".

1.04 QUESTIONS REGARDING DRAWINGS AND DOCUMENTS

- A. In general, no answer will be given to prospective bidders in reply to an oral question of the intent or meaning of the Drawings or other Contract Documents, or the equality or use of products or methods other than those designated or described on the Drawings or in the Specifications. Any information given to bidders other than by means of the Drawings and other Contract Documents, including Addenda, as described below, is given informally, for information and the convenience of the bidder only and is not guaranteed. The bidder agrees that such information shall not be used as the basis of nor shall the giving of any such information entitle the bidder to assert any claim or demand against the Owner or the Engineer on account thereof.
- B. To receive consideration, such questions shall be submitted in writing to William R. Facente at william.r.facente@warwickri.gov at least seven calendar days before the established date for receipt of Bids. If the question involves the equality or use of products or methods, it must be accompanied by drawings, specifications, or other data in sufficient detail to determine the equality or suitability of the product or method. In general, the

Owner will neither approve nor disapprove particular products prior to the opening of Bids; such products will be considered when offered by the Contractor for incorporation into the Work.

- C. The Owner will set forth as Addenda, which shall become a part of the Contract Documents, such questions received as above provided as in his sole judgement are appropriate or necessary and his decision regarding each. At least five days prior to the receipt of Bids, he will send a copy of these Addenda to those prospective bidders known to have taken out sets of the Drawings and other Contract Documents.
- D. The Contractor agrees to use the products and methods designated or described in the Specifications as amended by the Addenda.

1.05 PRE-BID CONFERENCE

- A. A mandatory pre-bid conference advising bidders of bid conditions and guidelines will be held on <u>Tuesday</u>, <u>March 28</u>, <u>2023 at 10:00 AM</u> at Pontiac Village Park, 145 Greenwich Avenue, Warwick, Rhode Island.
- B. Attending the Pre-bid conference is required to submit a bid.

1.06 BIDDERS TO INVESTIGATE

A. Bidders are required to submit their Bids upon the following express conditions, which shall apply to and be deemed a part of every Bid received, viz.:

Bidders must satisfy themselves by personal examination of the Work and by such other means as they may wish, as to the actual conditions there existing, the character and requirements of the Work and difficulties attendant upon its execution, and the accuracy of all estimated quantities stated in the Bid.

1.07 INFORMATION NOT GUARANTEED

- A. All information given on the Drawings or in the other Contract Drawings relating to subsurface and other conditions, natural phenomena, existing pipes and other structures is from the best sources at present available to the Owner. All such information is furnished only for the information and convenience of bidders and is not guaranteed.
- B. It is agreed and understood that the Owner does not warrant or guarantee that the subsurface or other conditions, natural phenomena, existing pipes or other structures encountered during construction will be the same as those indicated on the Drawings or in the other Contract Documents.

C. It is agreed further and understood that no bidder or Contractor shall use or be entitled to use any of the information made available to him or obtained in any examination made by him in any manner as a basis of or ground for any claim or demand against the Owner, arising from or by reason of any variance which may exist between the information made available and the actual subsurface or other conditions, natural phenomena, existing pipes of other structures actually encountered during the construction work, except as may otherwise be expressly provided for in the Contract Documents.

1.08 CONDITIONS OF WORK

A. Each bidder must inform himself fully of the conditions relating to the construction and labor under which the work is now or will be performed; failure to do so will not relieve the successful bidder of his obligation to furnish all materials and all labor necessary to carry out the provisions of the Contract Documents and to complete the contemplated Work for the consideration set forth in his bid. Insofar as possible, the Contractor, in the carrying out of his work, shall employ such methods or means as will not cause any interruption of or interference with: the operation of the existing sewer; traffic; use of existing facilities and utilities; locations of existing utilities and structures affecting the work or other similar conditions at the site; character of equipment and facilities needed preliminary to and during prosecution of the work; requirements of owners and controlling authorities, having jurisdiction over the various lands, existing structures, facilities, and utilities; and all other conditions affecting the work to be done, and the labor and materials needed; and he shall make his bid in sole reliance thereon; and shall not, at any time after submission of a bid, assert that there was any misunderstanding in regard to the nature or amount of the work to be done.

1.09 BLANK FORM FOR BID

- A. Each bid must be submitted on the prescribed form and any other requested information. All blank spaces for bid prices must be filled in, in ink or typewritten, both in words and numerical figures, and be signed by the bidder with his business address and place of residence. Where both written words and numerical figures are given, the written words shall apply in the event of conflict. All bids shall be prepared in conformity with, and based upon and submitted subject to, all requirements of the Specifications and Drawings, together with all addenda thereto.
- B. Bidders shall remove and submit the Bid pages (section 00200 and 00300), Bid Bond pages (Section 00400) and Appendix B. All pages shall be correctly assembled, and submitted in accordance with Section 00100. All erasures or other changes in the Bid must be properly initialed by an authorized representative of the Bidder.

1.10 WITHDRAWAL OF BIDS

A. Except as hereinafter in this subsection otherwise expressly provided, once his Bid is submitted and received by the Owner for consideration and comparison with other bids

similarly submitted, the bidder agrees that he may not and will not withdraw it within Ninety (90) consecutive calendar days after the actual date of the opening of Bids.

- B. Upon proper written request and identification, Bids may be withdrawn only as follows:
 - 1. At any time prior to the designated time for the opening of Bids.
 - 2. Provided the Bid has not theretofore been accepted by the Owner, at any time subsequent to the expiration of the period during which the bidder has agreed not to withdraw his Bid.
- C. Unless a Bid is withdrawn as provided above, the bidder agrees that it shall be deemed open for acceptance until the AGREEMENT has been executed by both parties thereto or until the Owner notifies a bidder in writing that his Bid is rejected or that the Owner does not intend to accept it, or returns his Bid deposit. Notice of acceptance of a Bid shall not constitute rejection of any other Bid.

1.11 INTERESTED PARTIES TO CONTRACT

A. The undersigned declares; that the only person interested this Bid as principals are named herein as such; that no official of the Owner and no person acting for or employed by the Owner is interested directly or indirectly in this Bid, or in any contract which may be made under it, or in any expected profits to arise therefrom; that this Bid is made in good faith, without fraud, collusion or connection with any other person bidding or refraining from bidding for the same work; that he has examined carefully the said instructions and all other documents bound herewith and the Contract Drawings relating to the Contract covered by this Bid and hereby makes them part of this Bid; that he has informed himself fully in regard to all conditions pertaining to the work and place where it is to be done; and that he has made his own examination and carefully checked his estimates for cost and from them makes this Bid.

1.12 ABILITY AND EXPERIENCE OF BIDDER

- A. No award will be made to any bidder who cannot satisfy the Owner that he has sufficient ability and experience in this class of work and sufficient capital and plant to enable him to prosecute and complete the Work successfully within the time named. The Engineer and the Owner may make such investigation as they deem necessary to determine the ability of the bidder to perform the work; and the bidder shall furnish to the Engineer and the Owner all such information and data for this purpose as the Engineer and the Owner may request.
- B. The Owner reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the Contract and to complete the Work contemplated therein within the time stated. The Owner's decision or judgement on these matters shall be final, conclusive, and binding for all parties involved.

1.13 BIDS

- A. The Owner reserves the right to waive any informalities in, or to reject any or all Bids which in its sole judgement are either incomplete, conditional, obscure, or not responsive or which contain additions not called for, erasures not properly initialed, alternative, or similar irregularities, or the Owner may waive such omissions, conditions, or irregularities as he may feel appropriate.
- B. Conditional bids will not be accepted. Bidder(s) will be disqualified if more than one proposal is received from an individual, firm, partnership, corporation or association, under the same or different names and such proposals will not be considered.
- C. The Owner reserves the right to reject any or all Bids, should the Owner deem it to be in the public interest to do so.

1.14 COMPARISON OF BIDS

- A. Bids will be compared on the basis of the experience and competence of the bidders and on the basis of the totals of the quantities listed in the proposal under the enumerated items at the unit prices or lump sums bid for these items. The Contract will be awarded to the lowest responsive, responsible and eligible bidder as determined by the Owner and/or its authorized representatives or agents. However, the Owner may reject any and all bids if it is in the public interest to do so.
- B. The term, "Lowest responsive, responsible and eligible bidder," shall mean the bidder whose bid is the lowest of those bidders possessing the skill, ability and integrity necessary for the faithful performance of the Work; who shall certify that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work.
- C. Bids should be made on each separate item of work shown in the bid (proposal) with reasonable relation to the probable cost of doing the work included in such items. The Owner reserves the right to reject, wholly, any bid on which an item or items thereof are obviously unbalanced or appear to the Owner to be so unbalanced as to affect or to be liable to affect adversely any interests of the Owner. The attention of the bidder is called to the fact that unbalancing of bids may adversely affect the Contractor if certain portions for the Work are increased or decreased as provided in the Contract Documents.
- D. A bidder shall state the proposed price for the work by which the bids will be compared. This price is to cover all the expenses incidental to the completion of the work in full conformity with the Contract, Specifications, and Drawings. In the event that there is a discrepancy between the unit prices and the extended totals, the unit prices shall govern. In the event that there is a discrepancy between the lump-sum or unit prices written in words and numerical figures, the prices written in words shall govern. No bid will be accepted which does not contain a unit price or lump sum as indicated for each of the applicable items enumerated in the proposal form.

1.15 REDUCTION IN SCOPE OF WORK

A. The Owner reserves the right to decrease the scope of the work to be done under this Contract and to omit any work in order to bring the cost within available funds. To this end, the Owner reserves the right to reduce the quantity of any items or omit all of any as set forth in the BID, either prior to executing the Contract or at any time during the progress of the Work. The Owner further reserves the right, at any time during the progress of the Work, to restore all or part of any items previously omitted or reduced. Exercise by the Owner of the above rights shall not constitute any ground or basis of claim for damages or for anticipated profits on the work omitted.

1.16 CONTRACT BONDS

- A. The Bidder whose Bid is accepted agrees to furnish the Contract Bonds in the forms which follow in Section 00400, titled CONTRACT BONDS, each in the sum of the full amount of the Bid and/or Contract Price as determined by the Engineer, and duly executed and acknowledged by the said bidder as Principal and by a surety company qualified to do business under the laws of Rhode Island and satisfactory to the Owner, as Surety, for the faithful performance of the contract and payment for labor and materials. The premiums for such Bonds shall be paid by the Contractor.
- B. Surety Companies executing the Contract Bonds must also appear on the U.S. Treasury Department's most current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (Amended) by the Audit Staff Bureau of Accounts.

1.17 POWER OF ATTORNEY

A. Attorneys-in-fact who sign Bid Bonds or Contract Bonds must file with each Bond a certified and effectively dated copy of their power of attorney.

1.18 EXECUTION OF AGREEMENT

- A. The Bidder whose Bid is accepted will be required and agrees to duly execute the AGREEMENT and furnish the required CONTRACT BONDS within the time limit stated in the BID after notification that the AGREEMENT is ready for signature.
- B. The Bidder whose Bid is accepted upon his failure or refusal to duly execute the AGREEMENT and furnish the required CONTRACT BONDS within the time limit stated in the BID, shall forfeit to the Owner as liquidated damages for such failure or refusal, the surety deposited with his BID.

1.19 INSURANCE CERTIFICATES

A. The Contractor will not be permitted to start any construction work until he has submitted certificates covering all insurances called for under that subsection of the AGREEMENT,

titled "Insurance." The Contractor shall submit said certificates to Owner under said subsection.

1.20 LAWS AND REGULATIONS

A. The bidder's attention is directed to the fact that all applicable Federal and State laws, municipal ordinances, and rules and regulations or authorities having jurisdiction over construction of the project, shall apply to the Contract throughout, and shall be deemed to be included in the Contract the same as though herein written out in full.

1.21 WORK ON STATE, MUNICIPAL, AND PRIVATE PROPERTY

A. Particular attention is hereby directed to the fact that portions of the Work included under this Contract will be done within the limits of properties that are State-owned, municipal-owned, or privately owned. The Contractor shall be responsible for coordinating the prosecution of the Work of this Contract with the property owner and for providing work in accordance with any additional requirements as specified herein.

1.22 DATUM OR LEVELS

A. The figures given in the Contract and Specifications or upon the Drawings after the word elevation, shall mean the distance in feet above mean sea level, the base of the State of Rhode Island and the United States Geodetic Survey (U.S.G.S.).

1.23 STATE SALES AND USE TAX

A. Materials and equipment purchased for installation under this Contract are exempt from the Rhode Island Sales Tax. The Contractor shall file for exemption on behalf of the Owner with the State of Rhode Island Department of Taxation as required by law. The exemption from the Sales Tax shall be taken into account by the Contractor during bidding.

1.24 MANUFACTURER'S EXPERIENCE

A. Wherever it may be written that an equipment manufacturer must have a specified period of experience with his product, equipment which does not meet the specified experience period

may be considered by the Owner if the equipment supplier or manufacturer is willing to provide a sufficient bond or cash deposit as determined by the Owner for the duration of the specified time period which will guarantee full replacement of that equipment in the event of failure at no additional cost to the Owner.

1.25 PROTECTION OF LIVES AND HEALTH

A. The project is subject to all of the Safety and Health Regulations as promulgated by the United States Department of Labor (Title 29, Part 1926/1910 CFR, 1985 revisions); the Contract Work Hours and Safety Standards Act (40 U.S.C. 327 et seq.) as supplemented by the Department of Labor Regulations (Title 29 CFR Part 5); and OSHA 2207, 1983 revisions; and all subsequent amendments thereto. Contractors are urged to make themselves familiar with the requirements of these regulations.

1.26 NONDISCRIMINATION IN EMPLOYMENT

- A. Contracts for work under this bid (proposal) will obligate the Contractors and subcontractors not to discriminate in employment practices.
- B. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, handicap, or national origin. The Contractor shall take affirmative action to ensure that applicants are employed and the employees are treated during employment without regard to their race, color, religion, sex, age, handicap, or national origin. Such actions shall include, but not be limited to, the following: employment, upgrading; demotions, or transfers; recruitment or recruitment advertising, layoffs, or terminations; rates of pay or other forms of compensation; selection for training including apprenticeship; and participation in recreational and education activities. The Contractor agrees to post in conspicuous places available to employees and applicants for employment notice to be provided setting forth the provisions of this non-discrimination clause. The Contractor will in all solicitations or advertisements for employees placed by or on behalf on the Contractor state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age, handicap or national origin. The Contractor will cause the foregoing provisions to be inserted in all sub-contracts for any work covered by this Contract so that such provisions will be binding upon each sub-contractor and upon sub- contracts for standard commercial supplies or raw materials.
- C. The Contractor shall keep such records and submit such reports concerning the racial and ethnic origin of applicants for employment and employees as the Owner may require as consistent with Federal and State law. The Contractor agrees to comply with such rules, regulations, or guidelines as the State of Rhode Island may implement these requirements. The Contractor further warrants that he will comply with the President's Executive Order No. 11246 or any preceding similar Executive Order relating thereto.
- D. Bidders and Contractors must, if required, submit a compliance report (EPA Form 5720-4) concerning their employment practices and policies in order to maintain their eligibility to receive award of the Contract.

- E. Successful bidders and Contractors must, if required, submit a list of all Subcontractors who will perform work on the project, and written signed statements from authorized agents of labor pools with which they will or may deal with for employees on the work, together with any information to the effect that such labor pools' practices or policies are in conformity with said Executive Order that they will affirmatively cooperate in or offer no hindrance to the recruitment, employment, and equal treatment of employees seeking employment and performing work under this Contract; or a certification as to when such agents or labor pools have failed or refused to furnish them, prior to award of the Contract.
- F. The successful bidder will be required to comply with Equal Opportunity Requirements and to abide by the prevailing wage rates for Public Work Projects for all employees on the job. It is the responsibility of Bidders to inform themselves as to the local labor conditions, overtime compensation, health and welfare contributions, labor supply and prospective changes or adjustment of wage rates. Information is available at the Department of Labor.
- G. The successful bidder must be prepared to comply with the provisions of the General Laws of Rhode Island and attention is called to Title 37, Chapter 13, Section 1-16, relative to the payment of wages, obligations and charges by Contractors on public works projects. Non-resident Contractors are subject to Section 44-1-6 of the RI General Laws, as amended, regarding OUT-OF-STATE CONTRACTORS.

1.27 SEQUENCE OF OPERATIONS

- A. The Contractor must submit to the Owner within fourteen (14) calendar days after execution of the Contractor Documents, a sequence of operations, giving detailed plans and schedules of his operation including any elements for by-pass pumping and/or flow diversion during the Work. Said sequence of operations shall be reviewed and must be approved by the Owner prior to the start of the Work. The Owner reserves the right to limit or, if found necessary and/or required, delay construction, or certain activities thereof, in certain areas of the Contract should the Owner deem it to be in the public's best interest to do so.
- B. The Contractor shall have no claim for additional compensation or damage on account of any such delays and/or required sequence of operations.
- C. The Contractor shall maintain uninterrupted utility services at all times, and plan his work accordingly.
- D. The Contractor shall coordinate his activities with any other contract and/or contractor to complete the Work as detailed on the Plans and Specifications.

1.30 AMERICAN IRON AND STEEL REQUIREMENTS

A. The Contractor acknowledges to and for the benefit of the City of Warwick ("Owner") that it understands the goods and services under this Agreement are being funded with monies made available by U.S. Department of Housing & Urban Development Community Development Block Grant Program that have statutory requirements commonly known as "American Iron and Steel;" that requires all of the iron and steel products used in the project to be produced in the United States ("American Iron and Steel

Requirement") including iron and steel products provided by the Contactor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Owner that (a) the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Owner. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Owner to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney's fees) incurred by the Owner resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, or any damages).

END OF SECTION

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SECTION 00300

BID

To the City of Warwick, Rhode Island, herein called the "Owner", for "Pontiac Village Park Site Improvements, Bid# 2023-395."

The Undersigned, as a bidder herein referred to as singular and masculine, declares as follows:

- (1) The only parties interested in this BID as Principals are named herein;
- (2) this BID is made without collusion with any other person, firm, or corporation;
- (3) no officer, agent, or employee of the Owner is directly or indirectly interested in this BID;
- (4) he has carefully examined the site of the proposed Work and fully informed and satisfied himself as to the conditions there existing, the character and requirements of the proposed Work, the difficulties attendant upon its execution and the accuracy of all estimated quantities stated in this BID, and he has carefully read and examined the Drawings, the annexed proposed AGREEMENT and the Specifications and other Contract Documents therein referred to and knows and understands the terms and provisions thereof;
- (5) he understands that information relative to subsurface and other conditions, natural phenomena, existing pipes and other structures (surface and/or subsurface) has been furnished only for his information and convenience without any warranty or guarantee, expressed or implied, that the subsurface and/or other conditions, natural phenomena, existing pipes and other structures (surface and/or subsurface) actually encountered will be the same as those shown on the Drawings or in any of the other Contract Documents and he agrees that he shall not use or be entitled to use any such information made available to him through the Contract Documents or otherwise or obtained by him in his own examination of the site, as a basis of or ground for any claim against the Owner or the Engineer arising from or by reason of any variance which may exist between the aforesaid information made available to or acquired by him and the subsurface and/or other conditions, natural phenomena, existing pipes and other structures (surface and/or subsurface) actually encountered during the construction work, and he has made due allowance therefore in this BID;
- (6) and he understands that the quantities of work tabulated in this BID or indicated on the Drawings or in the Specifications or other Contract Documents are only approximate and are subject to increase or decrease as deemed necessary by the Engineer; and he agrees that, if this BID is accepted he will contract with the Owner, as provided in the copy of the Contract Documents deposited in the office of the Engineer, this BID form being part of said Contract Documents, and that he will perform all the work and furnish all the materials and equipment, and provide all labor, services, plant, machinery, apparatus, appliances, tools, supplies and all other things required by the Contract Documents in the manner and within the time therein prescribed and according to the requirements of the Engineer as therein set forth, and that he will take in full compensation therefore the total dollar amount tabulated from the actual measured quantities of said work and each unit or lump sum price stated in this BID as hereinafter set forth.

(Note: All entries in the entire BID must be made clearly and in ink; price bid must be written in both words and figures.)

| Item <u>Number</u> | <u>Brie</u> | ef Descriptio | on: | | | Lump Sum Prices |
|-----------------------|-------------|------------------------------|---------------------|------------------------------------|-----------------------------------------------------------------|-----------------------------------------------|
| 1. A | Pla | | g all associated Si | | heet L.3 'Play Are and Demolition w | ea 1 Enlargement oork (including \$5,000 |
| | | | | | | dollars |
| | and | | cents (\$ |) | \$ | |
| В | Pla Fib | n' while sub er Safety Su | ostituting Poured | In Place Safety ding all associ | heet L.3 'Play Are y Surfacing with E lated Site Preparat | |
| | | | | | | dollars |
| | and | | cents (\$ |) | \$ | |
| 2. | inc | | ssociated Site Pre | | et L.4 'Play Area 2 demolition work (i | - |
| | - | | | | | dollars |
| | and | | cents (\$ |) | \$ | |
| 3. | O, | | nprovement Plan | | (1) – Entry Sign a associated Site Pr | s shown on sheet L.2 eparation and |
| | | | | | | dollars |
| | and_ | | cents (\$ |) | \$ | <u></u> |
| 4. | 'Gre | een Giant' a | | t L.2 'Overall S | Site Improvement | ı (standish x plicata) Plan' including all |
| | | | | | | dollars |
| | and | | cents (\$ |) | \$ | |

5. ALLOWANCE NO. 1 – Owner's Allowance

An Allowance of Five Thousand Dollars (\$5,000.00) shall be provided to address this item which will include, but will not be limited to: removal of unsuitable material, additional material, police details, etc.

\$5,000.00 Five Thousand Dollars

Lump Sum In Words

The bidder will specify the bid price in both words and figures. All words and figures shall be in ink or typed. In case of discrepancy between the prices in written words and those in figures, the written word shall govern.

The undersigned agrees that for extra work, if any, performed in accordance with the terms and provisions of the annexed form of AGREEMENT, he will accept compensation as stipulated therein as full payment for such extra work.

Please note that line item prices for items 1A., 1B. and 2. shall be inclusive of the allowance. The Owner reserves the right to alter the line item prices with respect to the allowance, to increase or decrease allowances.

ALLOWANCES

As part of the Base Bid (Total Bid), the Bidder Agrees to carry the allowances listed above in the base bid of the contract. The Owner reserves the right to remove these items from the contract totally or in part and to adjust the contract sum to reflect the actual costs of the construction authorized by the Owner.

If the Bid is accepted by the OWNER, the undersigned agrees to commence work under this Contract on a date to be specified in a written "Notice to Proceed" by the Owner and complete the entire work provided to be done under this Contract within the time stipulated in Table "A" of the AGREEMENT.

As provided in the INFORMATION FOR BIDDERS, the bidder hereby agrees that he will not withdraw this BID, within 90 consecutive calendar days after the actual date of the opening of Bids, and that, if the Owner shall accept this BID, the bidder will duly execute and acknowledge the AGREEMENT and furnish, duly executed and acknowledged, the required CONTRACT BONDS within ten (10) calendar days after notification that the AGREEMENT and other Contract Documents are ready for signature.

| (SEAL) | L.S. |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| · | (Name of Bidder) |
| В | V |
| | (Signature and title of authorized representative) |
| | |
| | (Business address) |
| | (City and State) |
| | (City and State) |
| Da | nte |
| | corporated in the State (or Commonwealth) of ership - an individual. (Bidder must add and delete as necessar |
| | orporate seal and give below the names of its president treasure p, give full names and residential addresses of all partners; an different from business address.) |
| The required names and addresses of all follows: | persons interested in the foregoing Bid, as Principals, are a |
| | |
| | |
| | |
| | |
| (Add sun | plementary page if necessary) |

CERTIFICATE OF AUTHORIZATION FOR BIDDING REPRESENTATIVE

(Note: Bidder must complete for certification of authorized representative signing Bid.) At a duly authorized meeting of the Board of Directors of the of Corporation) at which all the Directors were present or waived notice, it was voted that (Name of Authorized Representative) (Title) of this company shall be, and hereby is, authorized to execute bidding documents, contracts and bonds in the name and on behalf of said company, and to affix the corporate seal thereto, and such execution of any contract obligation in this company's name on its behalf of such under seal of the company shall be valid and binding upon this company. (Title) A true copy ATTEST_ (Clerk) Place of Business____ (Name of Corporation) I hereby certify that I am the clerk of the ___ _____, that ____ (Name of Authorized Representative) is the duly elected ___ of said company, and that the (Title) above vote has not been amended or rescinded and remains in full force and effect as of the date of this contract. Corporate Seal (Clerk)

STATEMENT OF BIDDERS' QUALIFICATIONS

The following shall accompany the bid and is required as evidence of the bidder's qualifications to perform the work, as bid upon, in accordance with the contract drawings and specifications. This statement must be notarized. All questions must be answered. Additional data may be submitted on separate attached sheets.

| 1. | Name of | of Bidder | | | | |
|-------|---------|------------------|-------------------|------------------------------|--------------------|-----------------|
| 2. | Permai | nent Main Office | Address | | | |
| 3. | | | | ract | | |
| 4. | When | Organized? | | | | |
| 5. | Where | Incorporated, If | a Corporation | | | |
| 6. | Years (| Contracting unde | er Present Name_ | | | |
| 7. | List co | ntracts on hand, | and those comple | eted similar in nature to th | nis kind of proje | ct. |
| Owner | | Engineer | Contract | Description | Contract Amount | Completion Date |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 8. | | | | plete, state where and wh | | |
| 9. | If you | have ever defaul | ted on any contra | act, state where and why. | | |

| Name | Residence | Title | Firm |
|------------------|----------------------------------|---------------------------|------------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| G () | | . ()6 41 | |
| State name(s) as | nd qualifications of resident su | ipervisor(s) for this pro | gect. |
| | | | |
| | | | |
| List major equi | pment available for this projec | et and identify ownershi | ip or rental. |
| 3 1 1 | 1 3 | · | • |
| | | | |
| | | | |
| | | | |
| Will you furnisl | n a detailed financial statemen | t and other information | n, requested by the Ow |
| List bank refere | nces for verifying financial ab | oility of your company. | |
| | | <u>idress</u> | |

| Dated at | this | day of | | 20 | |
|--------------------|---------------------------|-----------------|--------------------------|-------------------|--|
| | | | | | |
| | | | (Name of Bidder) | | |
| | | | Ву: | | |
| | | | | | |
| State of | | | (Title) | | |
| County of | | | | | |
| | | being dul | y sworn in person, dep | oses and says | |
| that he is | | of | | | |
| (Title | e) | | Name of Bidder) | | |
| that he is the fir | m's duly authorized agen | t to execute tl | nese contract documen | ts, and that the | |
| answers to the f | oregoing questions and a | ll statements | therein contained are of | correct and true. | |
| Subscribed and | sworn to before me this _ | | day of | | |
| | | | | | |
| (SEAL) | | | | | |
| | | | (Notary Public) | | |
| | | | | | |
| | | | | | |
| | | | (My Commission I | Expires) | |
| | | | | | |

The undersigned hereby authorized and requests any person, firm or corporation, to furnish all information requested by the Owner and/or its designated agents relative to the recitals comprising

this Statement of the Bidder's Qualifications.

15.

STATEMENT OF PROPOSED SUBCONTRACTORS

The following shall accompany the bid and is required as evidence of the bidder's qualifications to perform the work as bid upon, in accordance with the contract drawings and specifications. The Bidder must state the names and appurtenant information of all major subcontractors he proposed to use to complete the work as bid upon. Additional data may be submitted on separate attached sheets.

| If subcontractors are not to be used to complete the Work and/or any portion thereof, as herein bid upon, the Bidder must acknowledge by writing "NONE" |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description of Work_ |
| Approximate percentage of Total Bid |
| Proposed Subcontractor, Name |
| Address_ |
| Description of Work_ |
| Approximate percentage of Total Bid |
| Proposed Subcontractor, Name |
| Address |
| Description of Work |
| Approximate percentage of Total Bid |
| Proposed Subcontractor, Name |
| Address |
| |

Bidder to insert description of work, percentage of Total BID, and subcontractors' names as may be required.

This is to certify that all names of the above-mentioned subcontractors are submitted with full knowledge and consent of the respective parties.

| contract. | |
|-----------|--------------------|
| Date | Bidder |
| | (Name of Bidder) |
| | Ву |
| | (Signature) |
| | |
| | (Title) |
| | |
| | (Business Address) |
| | |
| | (City and State) |

The Bidder warrants that none of the proposed subcontractors have any conflict of interest as respects this

STATE OF RHODE ISLAND

UTILIZATION OF MINORITY BUSINESS ENTERPRISES

This project is subject to Chapter 37-14.1 of the Rhode Island General Laws, and regulations promulgated thereunder, which require that ten percent (10%) of the dollar value of work performed on the project be performed by minority business enterprises.

The Bidder, as part of the Bid, must submit a MBE PLAN outlining the manner in which he shall make a substantial and concerted effort to meet the ten percent (10%) MBE requirement and submit said plan to the Director of the Rhode Island Department of Administration for approval.

The plan shall include a projection of the number and types of subcontracts to be awarded and a projection of the number and types of MBE's likely to be available to compete for subcontracts from the prime contractor over the period of the project.

PROPOSED MBE PLAN

| Proposed MBE Subcontractor | Description of Work | | Dollar Value (\$) | % of Total Contract |
|------------------------------------------------------------------|------------------------------------------------------|-------------|----------------------|------------------------|
| | | | | _ |
| | | | _ | |
| | | | _ | _ |
| | | | _ | _ |
| _ | | | _ | |
| | _ | | _ | _ |
| Total MBE Participation | | \$ | | |
| Bidder to insert description of equired. | of work, percentage of Total BID | , and MBE | subcontractors' | names as may |
| This is to certify that all national nowledge and consent of the | ames of the above-mentioned Mane respective parties. | MBE subcor | ntractors are su | bmitted with f |
| The Bidder warrants that nespects this contract. | one of the proposed MBE sub- | contractors | have any conf | lict of interest |
| Date | Bidder | | | |
| | (Na | me of Bidd | er) | |

| By | |
|----|--------------------|
| | (Signature) |
| | |
| | (Title) |
| | (Title) |
| | |
| | (Business Address) |
| | |
| | |
| | (City and State) |

SECTION 00400

CONTRACT BONDS

PERFORMANCE BOND

(NOTE: This Bond is issued simultaneously with the attached Labor and Materials Bond in favor of the Owner.)

| KNOW ALL MEN BY THESE PRESENTS | : | | | |
|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| That we, | (an individual, a partnership, a corporation) | | | |
| duly organized under the Laws of the State of, | | | | |
| and having a usual place of business at | , | | | |
| as Principal, and | , a corporation duly organized | | | |
| under the Laws of the State of | , | | | |
| and duly authorized to do business in the Sta | te Rhode Island of, | | | |
| and having a usual place of business at as Surety, are holden and stand firmly bou obligee, in the sum of | nd and obligated unto City of Warwick, Rhode Island, as | | | |
| | ca, to and for the true payment whereof we bind ourselves strators, successors, and assigns, jointly and severally, firmly | | | |
| Documents in said AGREEMENT referred t dated, has en | itten AGREEMENT (which together with the Contract of are collectively sometimes referred to as the "Contract") attered into a contract with the said obligee for "Pontiac City of Warwick, Rhode Island, a copy of which agreement part hereof. | | | |
| truly keep and fully and faithfully perform al the "Contract Documents" referred to in said said AGREEMENT sometimes referred to a | this obligation is such that if the Principal shall well and l of the terms and conditions of said AGREEMENT and of AGREEMENT (which collectively are hereinafter and in sthe "Contract") and all modifications thereof on the on shall be void; otherwise it shall remain in full force and | | | |

effect.

Whenever the said Principal shall be, and declared by the Owner to be, in default under the said Contract, the Owner having performed the Owner's obligations thereunder Surety, for value received, shall promptly remedy the default, or, at the option of the Owner, shall promptly.

- (a) Complete the said AGREEMENT and/or Contract in accordance with its terms and conditions, or
- (b) Obtain a bid or bids for submission to and the approval of the Owner for completing the said AGREEMENT and/or Contract and any modifications thereof in accordance with the terms and conditions thereof, and upon determination by the Owner and the Surety of the lowest responsible and acceptable bidder, arrange for a contract between such bidder and the Owner, and make available to the Owner as the work progresses (even though there should be default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less a sum that shall be equal to the difference between the Contract price as fixed and provided in said AGREEMENT and/or Contract or any modifications thereof to be pair thereunder to the Principal and the amount previously paid by the Owner to and/or for the account of and/or chargeable against the Principal, but not exceeding (including other costs and damages for which the Surety may be liable hereunder) the amount set forth in the first paragraph hereof.

The Surety, for value received, agrees further that no changes in, omissions from, or alterations, modifications or additions to the terms and provisions of said AGREEMENT and/or Contract or the Work to be performed thereunder, and that no extensions of time given or changes made in the manner or time of making payments thereunder, shall in any way effect the Surety's obligations on this bond, and the Surety hereby waives notice of any such changes, omissions, alterations, modifications, additions or extensions.

No right of action shall accrue on this Bond to or for the use of any persons other than the Owner named herein or the heirs, executors, administrators, successors and assigns of the Owner.

BID#2023-395 00400-2 CONTRACT BONDS

| IN WITHESS WHEREOF, we have her | eunto set our mands and sears to | |
|----------------------------------|----------------------------------|--------|
| _counterparts of this bond, this | day of _ | |
| in the year Two Thousand and | | |
| | | (SEAL) |
| | Principal | |
| | | (SEAL) |
| | Principal | |
| | | (SEAL) |
| | Principal | |
| | | (SEAL) |
| | Surety | |
| | | (SEAL) |
| | Surety | |

IN WITNESS WHEDEOE we have because set our hands and seek to

If the Principal (Contractor) is a partnership, the Bond should be signed by each of the partners.

If the Principal (Contractor) is a corporation, the Bond should be signed in its correct corporate name by its duly authorized officer or officers.

If this Bond is signed on behalf of the Surety by an attorney-in-fact, there should be attached to it a duly certified copy of his power of attorney showing his authority to sign such Bonds.

There should be executed an appropriate number of counterparts of the Bond corresponding to the number of counterparts of the AGREEMENT.

Date of Bond must not be prior to the date of Contract.

Important

NOTE:

Surety Companies executing BONDS must appear on the U.S. Treasury Department's most current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts and be authorized to transact business in the state where the PROJECT is located.

The attention of the Surety Companies and Principal executing this Performance Bond is Directed to the fact that said Bond shall remain in full effect throughout the life of any guaranty or warranty periods stipulated in the Contract Documents and/or Agreement.

LABOR AND MATERIALS BOND

(NOTE: This Bond is issued simultaneously with the attached Performance Bonds in favor of the Owner.)

KNOW ALL MEN BY THESE PRESENTS:

| at we, |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (an individual, a partnership, a corporation) |
| y organized under the Laws of the State of, |
| ing a usual place of business at, |
| Principal, anda corporation duly organized |
| ler the Laws of the State of, |
| duly authorized to do business in the State of Rhode Island, |
| having a usual place of business at |
| ful money of the United States of America, to and for the true payment whereof we bind selves and, each of us, our heirs, executors, administrators, successors, and assigns, jointly severally, firmly by these presents. |
| IEREAS, the Principal, be means of a written AGREEMENT (which together with the Contract cuments in said AGREEMENT referred to are collectively sometimes referred to as the "Contract") ed, has entered into a contract with the said obligee for "Pontiac lage Park Site Improvements, Bid# 2023-283" in the City of Warwick, Rhode Island, a copy of which element is attached hereto and by references made a part hereof. |

NOW, THEREFORE, THE CONDITION of this obligation is such, that if the Principal shall promptly make payments to all claimants as hereinafter defined, for all labor performed or furnished and for all materials and equipment furnished for or used in or in connection with the Work called for by said AGREEMENT and/or Contract and any modifications thereof, including lumber used but not incorporated in said Work, and for the rental or hire of vehicles, tools and other appliances and equipment furnished for or used in connection with said Work, this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

(a) A claimant is defined as one having a direct contract with the Principal or with a subcontractor of the Principal for labor, materials and/or equipment used or reasonably required for use in the performance of the said Work, labor and materials being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental or equipment directly applicable to the said AGREEMENT and/or Contract and any modifications thereof.

- (b) The above named Principal and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials or equipment were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any costs or expenses of any such suit.
- (c) No suit or action shall be commenced hereunder by any claimant.

Unless claimant, other than one having a direct contract with the Principal, shall have given written notice to any two of the following: the Principal, the Owner, or the Surety above named, within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials or equipment for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials or equipment were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, Owner or Surety at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the said Work is located, save that such service need not be made by a public officer;

After the expiration of one (1) year following the date on which the Principal ceased work on said AGREEMENT and/or Contract and any modifications thereof, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

Other than in a state court of competent jurisdiction in and for the county or other political subdivision of the State in which the said Work, or any part thereof, is situated, or in the United States District Court for the district in which the said Work, or any part thereof, is situated, and not elsewhere.

(d) The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics liens which may be filed of record against said AGREEMENT and/Contract or said Work, whether or not claim for the amount of such lien be presented under and against this bond.

The surety, for value received, agrees further that no changes in, omissions from, or alterations, modifications or additions to the terms and provisions of said AGREEMENT and/or Contract or the Work to be performed thereunder, and that no extensions of time given or changes made in the manner or time of making payments thereunder, shall in any way affect the Surety's obligations on this Bond, and the Surety hereby waives notice of any such changes, omissions, alterations, modifications, additions or extensions.

BID#2023-395 00400-5 CONTRACT BONDS

| accentagements of this Road, this | | |
|-----------------------------------|-----------|--------|
| counterparts of this Bond, this | aay oi | , in |
| the year Two Thousand and | | |
| | | (SEAL) |
| | Principal | (0-1) |
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| | Principal | |
| | Principal | (SEAL) |
| | Ттистраг | |
| | Surety | (SEAL) |
| | | (SEAL) |
| | Surety | (~B/E) |

NOTE:

If the Principal (Contractor) is a partnership, the Bond should be signed by each of the partners.

If the Principal (Contractor) is a corporation, the Bond should be signed in its correct corporate name by its duly authorized officer or officers.

If this Bond is signed on behalf of the Surety by an attorney-in-fact, there should be attached to it a duly certified copy of his power of attorney showing his authority to sign such Bonds.

There should be executed an approximate number of counterparts of the Bond corresponding to the number of counterparts of the AGREEMENT.

Date of Bond must not be prior to the date of Contract.

Important

Surety Companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the PROJECT is located.

The attention of the Surety Companies and Principal executing this Labor and Materials Bond is directed to the fact that said Bond shall remain in full effect throughout the life of any guaranty or warranty periods stipulated in the Contract Documents and/or Agreement.

CERTIFICATE OF ACKNOWLEDGMENT OF CONTRACTOR IF A CORPORATION For CONTRACT BONDS

| State of | | | |
|------------------------------------------------|------------------------------|-------------------------------------------------------------------------------------------------------------------------------|----------------|
| County of | | | |
| On this | day of | , 20 | , before |
| me personally came _ | | to me known, who be | ing by me duly |
| sworn, did depose and | l say as follows: | | |
| That he resides at | | | |
| and is the | | | |
| of | | | |
| corporate seal of said corporate seal and it w | corporation; that the seal a | the foregoing instrument; that he ffixed to the foregoing instrument Board of Directors of said corpand official designation. | nt is such |
| | | Notary Public (Seal) | |
| | My cor | nmission expires | |

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SECTION 00500

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1.01 GENERAL PROVISIONS

A. The duties and obligations imposed by these General Conditions will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply.

- B. Sections of Division 1, General Requirements govern the execution of the Work of all sections of the specifications.
- C. The Specifications are written in imperative and streamlined form. This imperative language is directed to the Contractor, unless stated otherwise.

1.02 DEFINITIONS

A. Wherever the words as listed in subsection 1.01 of the AGREEMENT or pronouns used in their stead occur in the Contract Documents, they shall have the meanings as given in the AGREEMENT.

1.03 MATERIALS AND EQUIPMENT

A. General

- 1. Unless otherwise provided in the Contract Documents, only new materials and equipment shall be incorporated in the Work.
- 2. As soon as possible after execution of the AGREEMENT, submit to the Engineer the names and addresses of the manufacturers and suppliers of all materials and equipment proposed to be incorporated into the Work.
- 3. When shop and working drawings are required as specified below, submit, prior to the submission of such drawings, data in sufficient detail to enable the Engineer to determine whether the manufacturer and/or the supplier have the ability to furnish a product meeting the Specifications.
- 4. Submit data relating to the materials and equipment proposed to be incorporated into the Work in sufficient detail to enable the Engineer to identify and evaluate the particular product and to determine whether it conforms to the Contract requirements. Such data shall be submitted in a manner similar to that specified for submission of shop and working drawings.

B. Handling

- 1. Handle, haul, and distribute materials and all surplus materials on the different portions of the Work, required to complete the Work in accordance with the Contract Documents.
- 2. Provide suitable storage room for materials and equipment during the progress of the Work, and be responsible for the protection, loss of, or damage to materials and equipment furnished under this Contract, until the final completion and acceptance of the Work.
- 3. Pay all storage and demurrage charges by transportation companies and vendors.

C. Storage of Excavated Material

- 1. Place excavated materials and equipment to be incorporated in the Work so as not to injure any part of the Work or existing facilities and so that free access can be had at all times to all parts of the Work and to all public utility installations in the vicinity of the Work.
- 2. Materials shall be kept neatly piled and compactly stored in such locations as will cause a minimum of inconvenience to public travel and adjoining owners, tenants and occupants.

D. Inspection

- 1. All materials and equipment furnished by the Contractor to be incorporated in the Work shall be subject to the inspection of the Engineer.
- 2. No material shall be processed or fabricated for the Work or delivered to the work site without prior concurrence of the Engineer.
- 3. Facilities and labor for the storage, handling, and inspection of all materials and equipment shall be furnished by the Contractor.
- 4. Defective materials and equipment shall be removed immediately from the site of the Work.

E. Inspection away from Site

1. If work to be done, away from the construction site, is to be inspected on behalf of the Owner during its fabrication, manufacture, or testing, or before shipment, the Contractor shall give notice to the Engineer of the place and time where such fabrication, manufacture, testing, or shipping is to be done. Such notice shall be in writing and delivered to the Engineer in ample time, as determined solely by the Engineer, so that the necessary arrangements for the inspection can be made.

F. Samples

- 1. Submit samples of materials for tests, as the Engineer deems necessary to demonstrate conformance with the Specifications. Such samples, including concrete test cylinders, shall be furnished, taken, stored, packed, and shipped by the Contractor as directed by the Engineer.
- 2. Furnish suitable molds for making concrete test cylinders. Except as otherwise expressly specified, the Owner shall make arrangements for, and pay for, the tests.
- 3. Pack samples so as to reach their destination in good condition, and label to indicate the material represented, the name of the building or work and location for which the material is intended, and the name of the Contractor submitting the sample. To ensure consideration of samples, notify the Engineer by letter that the samples have been shipped and properly describe the samples in the letter. Send letter of notification separate from the samples.
- 4. Submit data and samples, or place his orders, sufficiently early to permit consideration, inspection and testing before the materials and equipment are needed for incorporation in the Work. The consequences for failure to do so shall be the Contractor's sole responsibility.
- 5. In order to demonstrate the proficiency of workmen, or to facilitate the choice among several textures, types, finishes, surfaces, etc., provide such samples of workmanship of wall, floor, finish, etc., as may be required.
- 6. After review of the samples, data, etc. the materials and equipment used for the Work shall in all respects conform therewith.

G. Shop Testing

1. When required, furnish to the Engineer in triplicate, sworn copies of manufacturer's shop or mill tests (or reports from independent testing laboratories) relative to materials, equipment performance ratings, and concrete data.

1.04 CONTRACTOR'S SHOP AND WORKING DRAWINGS

- A. Submit shop drawings to the Engineer for review and approval.
- B. All submittals will be identified as the Engineer may require and in the number of copies also as required by the Engineer.

C. The data shown on the Shop Drawings will be complete regarding quantities, dimensions, specified performance and design criteria, materials and other data as particular to the Work that the Contractor proposes to provide.

1.05 OCCUPYING PRIVATE LAND

A. Entering or occupying with men, tools, materials, or equipment, any land outside the rights- of-way or property of the Owner (except after written consent from the proper parties) will not be permitted. A copy of the written consent shall be given to the Engineer.

1.06 INTERFERENCE WITH AND PROTECTION OF STREETS

- A. Obtain permits from the governing authorities prior to obstructing any portion of a street, road, or private way. If any street, road or private way is rendered unsafe by the Contractor's operations, he shall make such repairs or provide such temporary ways or guards as ordered by the governing authorities.
- B. Maintain streets, roads, private ways, and walks not closed in a passable and safe condition,
- C. Provide at least 24 hours in advance, notice to the Owner, Police, Fire and School Departments in writing, with a copy to the Engineer, if the closure of a street or road is necessary. Cooperate with all Departments in the establishment of alternate routes and provide adequate detour signs, plainly marked and well lighted, in order to minimize confusion.

1.07 SAFETY

- A. Take all precautions and provide safeguards to prevent personal injury and property damage. Provide protection for all persons including but not limited to employees and employees of other contractors and subcontractors; members of the public; and employees, agents and representatives of the Owner, the Engineer, and regulatory agencies that may be on or about the Work. Provide protection for all public and private property including but not limited to structures, pipes, and utilities, above and below ground.
- B. Provide and maintain all safety equipment such as fences, barriers, signs, lights, walkways, guards and fire prevention and fire-fighting equipment.

- C. Comply with all applicable Federal, State and local laws, ordinances, rules and regulations and lawful orders of all authorities having jurisdiction for the safety of persons and protection of property.
- D. Designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This responsible person shall have the authority to take immediate action to correct unsafe or hazardous conditions and to enforce safety precautions and programs.

1.08 EXISTING FACILITIES

A. Dimensions of Existing Structures

1. Where the dimensions and locations of existing structures are of importance in the installation or connection of any part of the Work, verify such dimensions and locations in the field before the fabrication of any material or equipment which is dependent on the correctness of such information.

B. Proposed Pipe Location

- 1. Exterior pipelines will be located substantially as indicated on the Drawings, but the right is reserved to the Owner, acting through the Engineer, to make such modifications in location as may be found desirable to avoid interference with existing structures or for other reasons. Where fittings, etc., are noted on the Drawings, such notation is for the Contractor's convenience and does not relieve him for laying and jointing different or additional items where required.
- 2. Small interior piping is indicated diagrammatically on the Drawings, and the exact location is to be determined in the field. Piping shall be arranged in a neat, compact, and workmanlike manner, with a minimum of crossing and interlacing, so as not to interfere with equipment or access way, and, in general, without diagonal runs.

C. Interference with Existing Works

1. Conduct operations so as to interfere as little as possible with existing works. Develop a program, in cooperation with the Engineer and interested officials, which shall provide for the construction and putting into service of the new works in the most orderly manner possible. This program shall be adhered to except as deviations therefrom are expressly permitted. All work of connecting with, cutting into, and reconstructing existing pipes or structures shall be planned to interfere with the

- operation of the existing facilities for the shortest time when the demands on the facilities best permit such interference, even though it may be necessary to work outside of normal working hours to meet these requirements. Electrical connections should be coordinated with the Owner so as to minimize disruption of normal plant operations. Before starting work which will interfere with the operation of existing facilities, perform preparatory work and see that all tools, materials and equipment are made ready and at hand.
- 2. Repair utilities damaged by the Contractors operations during the progress of the work and be responsible for correcting all damages to existing utilities and structures at no additional expense to the Owner. Contact the proper utility or authority to correct or make any changes due to utility or other obstructions during the work but the entire responsibility and expense shall be with the Contractor.
- 3. Make such minor modifications in the work relating to existing structures as may be necessary, without additional compensation.
- 4. Submit no claim for additional compensation by reason of delay or inconvenience in adapting his operations to the need for continuous flow of sewage.
- D. Existing Utilities or Connections
- 1. The location of existing underground pipes, conduits, and structures, as shown, has been collected from the best available sources. The Owner, together with its agents, does not imply nor guarantee the data and information in connection with underground pipes, conduits, structures and such other parts as to their completeness, nor their locations as indicated. The Contractor shall assume that there are existing water, sewer, gas and other utility connections to each and every building enroute, whether they appear on the drawings or not. An expense and/or delay occasioned by utilities and structures, or damage thereof, including those not shown, shall be the responsibility of the Contractor, at no additional expense to the Owner.
- 2. Above ground utilities may be present in the areas of the proposed Work. Take all necessary actions and/or precautions, including, but not limited to, utility company notification and necessary relocations (both temporary and permanent), to ensure proper protection of those aboveground utilities and appurtenances to be affected by his operations. All costs associated with the aboveground utilities shall be paid by the Contractor at no additional expense to the Owner.

- 3. If and when encountered, existing utilities shall be properly supported and protected during the construction work and the Engineer shall be notified accordingly. The operation of existing utilities shall not be interrupted except with written permission of the operator and owner of such utilities. Allow ample time for all measures as may be required for the continuance of existing utility operations. Take extreme precautions to minimize disruption of utilities. Make prompt and full restitution for repairs by others for all disruptions caused by operations required to perform the Work.
- 4. Comply with all requirements of utility organizations involved.

E. Failure to Repair

- 1. Any emergency rising from the interruption of electric, telephone, gas, water, or sewer service due to the activities of the Contractor, shall be repaired by the Contractor as quickly as is possible.
- 2. If and when, in the opinion of the Owner, the Contractor is not initiating repair work as expeditiously as possible upon notification to do so, the Owner, may at his own option, make the necessary repairs using his own forces or those of others. The cost of such repairs shall be subtracted from the payments due to the Contractor.

F. Disturbance of Bounds

1. Replace all bounds disturbed during the construction operation, at no additional cost to the Owner. The bounds shall be relocated by a land surveyor approved by the Engineer and registered in the State that the Work is to be done.

1.09 WORK TO CONFORM

- A. During its progress and on its completion, the Work shall confirm to the lines, levels, and grades indicated on the Drawings or given by the Engineer and shall be built in strict accordance with the Contract Documents and the directions given from time to time by the Engineer.
- B. All work done without instructions having been given therefore by the Engineer, without proper lines or levels, or performed during the absence of the Engineer, will not be estimated or paid for except when such work is authorized by the Engineer in writing. Work so done may be ordered uncovered or taken down, removed, and replaced at the Contractor's expense.

1.10 PLANNING AND PROGRESS SCHEDULES

- A. Before starting the Work and from time to time during its progress, as the Engineer may request, the Contractor shall submit to the Engineer a written description of the methods he plans to use in doing the Work and the various steps he intends to take.
- B. Within 14 calendar days after the date of formal execution of the AGREEMENT, the Contractor shall prepare and submit to the Engineer (a) a written schedule fixing the dates on which additional drawings, if any, will be needed by the Contractor and (b) a written schedule fixing the respective dates for the start and completion of various parts of the Work. Each such schedule shall be subject to review from time to time during the progress of the Work.

1.11 PRECAUTIONS DURING ADVERSE WEATHER

- A. During adverse weather and against the possibility thereof, take all necessary precautions so that the Work may be properly done and satisfactory in all respects. When required by the manufacturer of the material or equipment to be installed, protection shall be provided by use of tarpaulins, wood and building-paper shelters, or other suitable means.
- B. During cold weather, materials shall be preheated, if required, and the materials and adjacent structure into which they are to be incorporated shall be made and kept sufficiently warm so that a proper bond will take place and a proper curing, aging, or drying will result. Protected spaces shall be artificially heated by suitable means that will result in a moist or dry atmosphere according to the particular requirements of the work being protected. Ingredients for concrete and mortar shall be sufficiently heated so that the mixture will be warm throughout when used.

1.12 TEMPORARY HEAT

- A. If temporary heat is required for the protection of the Work, provide and install suitable heating apparatus, provide adequate and proper fuel, and shall maintain heat as required.
- B. Temporary heating apparatus shall be installed and operated in such manner that finished work will not be damaged.

1.13 ELECTRICAL ENERGY

- A. Make all necessary applications and arrangements and pay all fees and charges for electrical energy for power and light necessary for the proper completion of the Work and during its entire progress. Provide and pay for all temporary wiring, switches, connections, and meters.
- B. Provide sufficient electric lighting so that all work may be done in a workmanlike manner when there is not sufficient daylight.

1.14 CERTIFICATES OF CONFORMANCE

A. Furnish to the Engineer, in the manner as directed and prior to actual installation, notarized certificates of conformance for all materials to be furnished under this Contract. The notarized certificates of conformance shall state that the material to be furnished meets or exceeds all requirements specified under the Contract Documents. When so directed, the manufacturer's notarized certificates of conformance, certifying that the materials meet the requirements specified shall accompany each shipment of material. Unless otherwise specifically specified and/or directed by the Engineer, all testing of materials required under this Contract shall be provided by the Contractor at no additional expense to the Owner.

1.15 PATENTS

- A. Pay, at no additional expense to the Owner, all applicable royalties and license fees associated with the materials and construction methods to be used under this Contract. Defend all suits or claims for infringements of any patent rights, and save the Owner and Engineer harmless from loss on account thereof, except that the Owner shall be responsible for any such loss when a particular process, design, or product of a particular manufacturer (s) is specifically specified with no option to the Contractor. However, if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the Owner.
- B. Refer to Specification Section 00500, 1.07, Patents, regarding the Contractor's responsibilities for any patent rights associated with the materials and construction methods to be used under this Contract.

1.16 " OR EQUAL" CLAUSE

A. Whenever a material or article required is specified or shown on the drawings by using the name of the proprietary product of a particular manufacturer or vendor, any material or article which will perform adequately, in the Engineer's sole judgment and/or opinion, the duties imposed by the general design may be considered equal and satisfactory providing the material or article so proposed is of equal substance. It shall not be purchased or installed without his written approval. In all cases new material shall be used in the project.

- B. If more than one brand, name of material, device, or piece of equipment is shown or specified, each should be regarded as the equal of the other. Any other brand make of material, device or equipment, which in the opinion of the OWNER and/or ENGINEER, is the recognized equal of that specified (considering quality, workmanship, and economy of operation), and is suitable for the purpose intended, may be accepted.
- C. ENGINEER will be allowed a reasonable time within which to evaluate submittals for Substitute Items. ENGINEER will be the sole judge of acceptability. No "Or Equal" or Substitute Item will be ordered, installed or utilized without ENGINEER's prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing.

OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any "or equal" or substitute. ENGINEER will record time required by ENGINEER and ENGINEER's Consultants in evaluating substitutes proposed or submitted by CONTRACTOR and in making changes to the Contract Documents. Whether or not ENGINEER accepts a Substitute Item so proposed or submitted by CONTRACTOR, CONTRACTOR shall reimburse OWNER for the charges of ENGINEER and ENGINEER's Consultants for evaluating each such proposed Substitute Item.

1.17 ADDITIONAL OR SUBSTITUTE BONDS

A. If at any time the Owner, for justifiable cause, shall be or become dissatisfied with any Surety or Sureties than upon the performance or payment bonds, the Contractor shall, within five (5) calendar days after notice from the Owner so to do, substitute an acceptable bond (or bonds) in such form and sum and signed by such other Surety or Sureties as may

be acceptable to the Owner. The Contractor shall pay the premiums on such bonds with no additional expense to the Owner. No further payments shall be deemed due nor will be made until the new Surety or Sureties shall have furnished such as acceptable bond to the Owner.

1.18 SEPARATE CONTRACTS

- A. The Owner reserves the right to let other contracts in connection with the construction of the contemplated work of this project or contiguous projects of the Owner. The Contractor, therefore, will afford any such other contractors reasonable opportunity for the introductions and storage of their materials and the execution of their work, will properly connect and coordinate his work with theirs, and will not commit or permit any act which will interfere with the performance of their work.
- B. Coordinate operations with those of other contractors. Cooperation will be required in the arrangement for the storage of materials and in the detailed execution of the work.
- C. It is essential that all parties interested in the project cooperate to the end that the entire project will be brought to a successful conclusion as rapidly as possible, but the Owner cannot guarantee that no interference or delay will be caused thereby. Interference and delay resulting from such cooperation shall not be basis of claims against the Owner.

1.19 PAYROLLS OF CONTRACTOR AND SUBCONTRACTORS

- A. The Contractor and each of his Subcontractors shall prepare his payrolls on forms prescribed and in accordance with instructions to be furnished by the Owner. Within seven (7) days after the regular payment date of the payroll, the Contractor shall deliver to the Owner, with copies to the Engineer, a certified legible copy or copies of each such payroll. Each such payroll shall contain the statement required by the Federal Regulations issued pursuant to the "Anti-Kickback Statute", (48 Stat. 948; 18 U.S.C. 874; 40 U.S.C. 276C).
- B. Carrying any person on his payrolls not employed by him will not be permitted. Carrying employees of a subcontractor on his payrolls will not be permitted, but such employees must be carried on the payrolls of the employing subcontractor.

C. Each Contractor or Subcontractor shall preserve his weekly payroll records for a period of three (3) years form the date of completion of the Contract. The payroll records shall set out accurately and completely the name, occupational classification, and hourly wage rate of each employee, hours worked by him during the payroll period and full weekly wages earned by him, and deductions made from such weekly wages and the actual weekly waged paid to him. Such payroll records shall be made available at all times for inspection by the Owner or his authorized representatives, the Engineer or by agents of the United States Department of Labor.

1.20 PAYMENTS BY CONTRACTOR

A. Pay for all traffic control, safety, transportation and utility services not later than the 20th day of the calendar month following that in which services are rendered. Reimbursable costs for services rendered, as specified in the Contract Documents, shall not be incorporated into partial payment estimates until such time that the Contractor submits to the Engineer actual paid invoices from those in which services were rendered.

1.21 "DIG SAFE" LAW

- A. Comply with the Rhode Island General Law, Chapter 39-1.2, "Excavation Near Underground Utility Facilities" which became effective on July 1, 1984.
- B. Before proceeding with construction operations, the Contractor shall notify the State of Rhode Island Underground Plant Damage Prevention Systems (DIG SAFE at 811), and shall make such supplemental investigations, including exploratory excavations, by hand digging, as he deems necessary to uncover and determine the exact locations of utilities and structures, and shall have no claims for damages due to encountering subsurface structures or utilities in locations other than that shown on the drawings, or which were made known to the Contractor prior to construction operations. The Contractor shall be responsible and liable for all damages to the existing utilities and structures.
- C. Before commencing with the construction of any work, identify any water main, gas main, telephone duct, electric duct, and/or other utility present which is or could be in conflict with the proposed work.

- D. Relocation of the affected utilities shall be done as directed by the Owner and in accordance with the requirements of the utility company.
- E. The attention of the Contractor is directed to the fact that certain utility companies may not fall under the provisions of "DIG SAFE". Individual utility company notifications by the Contractor shall be necessary to ensure proper notification and protection of all existing utilities affected by this Contract.

1.22 FIRE PREVENTION AND PROTECTION

- A. State and municipal rules and regulations with respect to fire prevention, fire-resistant construction and fire protection shall be strictly adhered to and all work and facilities necessary therefore shall be provided and maintained by the Contractor in an approved manner.
- B. Provide fire protection equipment such as water tanks, hoses, pumps, extinguishers, and other materials, and apparatus, for the protection of the contract work, and adjacent property. Trained personnel experiences in the operation of all fire protection equipment and apparatus shall be available on the site whenever work is in progress, and at such other times as may be necessary for the safety of the public and the work.

1.23 DUST CONTROL

A. Exercise every precaution and means to prevent and control dust arising out of all construction operations from becoming a nuisance to abutting property owners or surrounding neighborhoods. Pavements adjoining pipe trench shall be kept clean of excess materials wherever and whenever directed by the Engineer. Repeated daily dust control treatment shall be provided to satisfactorily prevent the spread of dust until permanent pavement repairs are made and until earth stockpiles have been removed, and all construction operations that might cause dust have been completed. No extra payment will be made for dust control measures, compensation shall be considered to be included in the prices stipulated for the appropriate items as listed in the Bid.

1.24 DISPOSAL OF DEBRIS

A. The materials from the demolition, and those used in the construction of the Work throughout the project, shall be deposited in such a manner so as to not endanger persons or the Work, and so that free access may be had at any time to all hydrants, gates and existing equipment in the vicinity of the work. The materials shall be kept trimmed-up so as to be of as little inconvenience as possible to the public travel and plant operations. All excavated materials not approved for backfill and fill, all surplus material, and all rock and boulders resulting from the excavations, shall be removed and satisfactorily disposed of off the site by the Contractor, at no additional expense to the Owner.

B. The materials being removed from the pipelines and manholes during the cleaning process shall be deposited in such a manner as to not endanger the public, plant personnel or persons performing the work. Such debris deposits may be of such nature, high in biological organic contents, or chemically aggressive that they will require proper disposal in a safe, health risk free, environment. (Considered to be "Special Wastes" by Rhode Island Department of Environmental Management) Contact the Owner and Engineer and all agencies having jurisdiction thereof, for approval of debris disposal methods and locations of disposal, prior to disposing of any or all debris removed from pipe cleaning methods. All debris shall be removed and satisfactorily disposed of off the work site, at no additional expense to the Owner.

1.25 NIGHT, SATURDAY, SUNDAY AND HOLIDAY WORK

A. No work shall be done at night or on Saturdays, or Sundays or holidays without the prior written approval of the Owner and Engineer.

1.26 LENGTH OF WORK DAY

A. The Owner retains the right to restrict the Contractor to an eight-hour workday. Such restrictions shall not be the basis for damages or claims against the Owner.

B. The Contractor's attentions is also directed to the fact that should it be deemed necessary to perform various items of work during off-peak flow or traffic hours, early morning or late night hours, then he shall notify the Engineer a minimum of 24 hours in advance as to his intentions and reasons for the change in work hours. The Contractor shall be responsible for properly contacting and informing all involved parties of such a change in work hours. The Contractor shall not be entitled to any additional compensation from the Owner for any expenses that may be incurred by change of working hours and/or scheduling.

1.27 HURRICANE PROTECTION

A. Should hurricane warnings be issued, the Contractor shall take every practicable precaution to minimize danger to persons, to the work and to adjacent property. These precautions shall include closing all openings; removing all loose materials, tools and/or equipment from exposed locations; and removing or securing scaffolding and other temporary work.

1.28 REDUCTION IN SCOPE OF WORK

A. The Owner reserves the right to decrease the scope of the work to be done under this Contract and to omit any work should the Owner deem it to be in the public interest to do so. To this end, the Owner reserves the right to reduce the quantity of any items or omit all of any as set forth in the BID, either prior to executing the contract or at any time during the progress of the work. The Owner further reserves the right, at anytime during the progress of the work, to restore all or part of any items previously omitted or reduced. Exercise by the Owner of the above rights shall not constitute any ground or basis of claim for damages or for anticipated profits on the work omitted.

END OF SECTION

SECTION 00600

SUPPLEMENTARY CONDITIONS

| 1.01 | General |
|------|-------------------------------------------|
| 1.02 | Limits of Normal Excavation |
| 1.03 | Bolts, Anchor Bolts, and Nuts |
| 1.04 | Concrete Inserts |
| 1.05 | Sleeves |
| 1.06 | Cutting and Patching |
| 1.07 | Foundations, Installations and Grouting |
| 1.08 | Services of Manufacturer's Representative |
| 1.09 | Operating Instructions and Parts List |
| 1.10 | Lubricants |
| 1.11 | Special Tools |
| 1.12 | Equipment Drive Guards |
| 1.13 | Protection Against Electrolysis |
| 1.14 | Covering Excavated Trench |
| 1.15 | Maintaining Trench Excavations |
| 1.16 | Disruption of Storm Drains |
| 1.17 | Blasting |
| 1.18 | Nameplates |
| 1.19 | Special Safety Precautions |
| 1.20 | Land, Easements and Rights-of-Way |
| 1.21 | Cleaning Finished Work |

1.01 GENERAL

- A. These Supplementary Conditions are requirements which amend or supplement the General Conditions specified elsewhere.
- B. The duties and obligations imposed by these Supplementary Conditions will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply.
- C. Assertion of any claim for any additional compensation or damages on account of and/or the fulfillment of these Supplementary Conditions will not be allowed.

1.02 LIMITS OF NORMAL EXCAVATION

- A. In determining the quantities of excavation to which unit prices shall apply, the limits of normal width and depth of excavation shall be as described below, unless other limits are indicated in the Contract Documents.
- 1. For pipes in trenches, less than or equal to a depth of 10.0-feet, the normal width of the trench shall be measured between vertical planes which are a distance apart equal to the sum of 48 inches plus the nominal inside diameter of the pipe.
- 2. For pipes in trenches, between a depth greater than 10.0-feet and a depth of 20.0-feet, the normal width of the trench shall be measured between vertical planes which are a distance apart equal to the sum of 60-inches plus the nominal inside diameter of the pipe.
- 3. If the width so computed is less than 5.0-feet for trenches up to 10.0 feet deep than a width of 5.0 feet shall be the normal width. If the width so computed is less than 6.0-feet for trenches greater than 10.0-feet up to 20.0-feet than a width of 6.0-feet shall be the normal width.
- 4. The normal depth shall be measured to a distance of 0.5 feet below the bottom of the pipe in earth and 0.5 feet in rock, unless there be a cradle underneath the pipe, in which case the normal depth shall be measured to the underside of the cradle. The trench width for the cradle shall be assumed to be that specified above for pipes in the trench.
- B. Quantities for payment shall be in accordance with the above limits or the actual widths, **whichever** is less.
- C. For concrete placed directly against undisturbed earth, the normal width and depth of the excavation for such concrete shall be measured to the neat lines of the concrete as indicated on the Drawings or as ordered.
- D. For concrete placed against rock surfaces resulting from rock excavation, the normal width and depth of the excavation shall be measured to 4 inches outside the neat lines of the concrete as indicated on the Drawings or as ordered.

- E. For other structures, except manholes as noted below, the normal width shall be measured between vertical planes 1.0 feet outside the neat lines of the several parts of the structure, except that the width at any elevation shall be measured as not less than the width at a lower elevation. The normal depth shall be measured to the underside of that part of the structure for which the excavation is made.
- F. No additional width or depth of trenches excavated in earth or rock shall be allowed at standard circular manholes. The pay limit for rock removed outside proposed manholes shall commence one foot (1.0) outside the widest dimension of the structure or shall be the maximum connecting trench width, whichever is greater.
- G. Wherever bell holes are required for jointing pipe, they shall be provided without additional compensation over and above that resulting from measurements as above described.

1.03 BOLTS, ANCHOR BOLTS AND NUTS

- A. Furnish bolts, anchor bolts, nuts, washers, plates and bolt sleeves required by equipment to be installed under this Contract in accordance herewith. Anchor bolts shall have suitable washers and, where so required, their nuts shall be hexagonal.
- B. Anchor bolts, nuts, washers, plates, and bolt sleeves shall be galvanized unless otherwise indicated or specified.
- C. Expansion bolts shall have malleable iron and lead composition elements of the required number of units and size.
- D. Unless otherwise specified, stud, tap, and machine bolts, and nuts shall conform to the requirements of ASTM Standard Specification for Carbon Steel Externally and Internally Threaded Standard Fasteners, Designation A307. Hexagonal nuts of the same quality of metal as the bolts shall be used. All threads shall be clean cut and shall conform to ANSI Standard B1.1-1974 for Unified Inch Screw Threads (UN and UNR Thread Form).
- E. Bolts, anchor bolts, nuts and washers, specified to be galvanized, shall be zinc coated, after being threaded, by the hot-dip process in conformity with the ASTM Standard Specification for Zinc (Hot-Galvanized) Coatings on Products Fabricated from Rolled, Pressed and Forged Steel Shapes, Plates, Bars and Strip, Designation A123, or the ASTM Standard Specifications for Zinc Coating (Hot Dip)

- on Iron and Steel Hardware, Designation A153, as is appropriate.
- F. Bolts, anchor bolts, nuts, and washers specified to be stainless steel shall be Type 316 stainless steel unless otherwise indicated or specified.
- G. Anchor bolts and expansion bolts shall be set accurately. If anchor bolts are set before the concrete has been placed, they shall be carefully held in suitable templates of acceptable design. Where indicated on the Drawings, specified, or required, anchor bolts shall be provided with square plates at least 4 inches by 4 inches by 3/8 inches or shall have square heads and washers and be set in the concrete forms with suitable pipe sleeves, or both. If anchor or expansion bolts are set after the concrete has been placed, all necessary drilling and grouting or caulking shall be done by the Contractor and care shall be take not to damage the structure or finish by cracking, chipping, spalling, or otherwise during the drilling and caulking.

1.04 CONCRETE INSERTS

A. Concrete inserts for hangers shall be designed to support safely, in the concrete that is used, the maximum load that can be imposed by the hangers used in the inserts. Inserts for hangers shall be of a type which will permit adjustment of the hangers both horizontally (in one plane) and vertically and locking of the hanger head or nut. All inserts shall be galvanized.

1.05 CUTTING AND PATCHING

- A. The Contractor shall leave all chases or openings for the installation of his own or any other contractor's or subcontractor's work, or shall cut the same in existing work, and shall see that all sleeves or forms are at the Work and properly set in ample time to prevent delays. He shall see that all such chases, openings, and sleeves are located accurately and are of proper size and shape and shall consult with the Engineer and the contractors and subcontractors concerned in reference to this work.
- B. In case of his failure to leave or cut all such openings or have all such sleeves provided and set in proper time, he shall cut them or set them afterwards at his own expense, but in so doing he shall confine the cutting to the smallest extent possible consistent with the work to be done. In no case shall piers or structural members be cut without the written consent of the Engineer.

- C. The Contractor shall carefully fit around, close up, repair, patch, and point around the work specified herein to the satisfaction of the Engineer.
- D. All of this work shall be done by careful workmen competent to do such work and with the proper small hand tools. Power tools shall not be used except where, in the opinion of the Engineer, the type of tool proposed can be used without damage to any work or structures and without inconvenience or interference with the operation of any facilities. The Engineer's concurrence with the type of tools shall not in any way relieve or diminish the responsibility of the Contractor for such damage, inconvenience, or interference resulting from the use of such tools.
- E. The Contractor shall not cut or alter the work of any subcontractors or any other contractor, nor permit any of his subcontractors to cut or alter the work of any other contractor, or subcontractor, except with the written consent of the contractor or subcontractor whose work is to be cut or altered or with the written consent of the Engineer. All cutting and patching or repairing made necessary by the negligence, carelessness, or incompetence of the Contractor or any of his subcontractors shall be done by or at the expense of the Contractor and shall be the full responsibility of the Contractor.

1.06 FOUNDATIONS, INSTALLATION AND GROUTING

- A. Furnish materials and construct suitable concrete foundation for all equipment installed under this Contract, even though such foundations may not be indicated on the Drawings. The tops of foundations shall be at such elevations as will permit grouting as specified below.
- B. Equipment shall be installed by skilled mechanics and in accordance with the instruction of the manufacturer.
- C. In setting pumps, motors, and other items of equipment customarily grouted, make an allowance of at least 1-in. for grout under the equipment bases. Shims used to level and adjust the bases shall be steel. Shims may be left embedded in the grout, in which case they shall be installed neatly and so as to be as inconspicuous as possible in the completed work. Unless otherwise permitted, all grout shall be a suitable nonshrink grout.
- D. Grout shall be mixed and placed in accordance with the recommendations of the manufacturer. Where practicable, the grout shall be placed through

the grout holes in the base and worked outward and under the edges of the base and across the rough top of the concrete foundation to a peripheral form so constructed as to provide a suitable chamber around the top edge of the finished foundation.

E. Where such procedure is impracticable, the method of placing grout shall be as permitted by the Engineer. After the grout has hardened sufficiently, all forms, hoppers, and excess grout shall be removed, and all exposed grout surfaces shall be patched in an approved manner, if necessary, given a burlap-rubbed finish, and painted with at least two coats of an acceptable paint.

1.07 SERVICES OF MANUFACTURER'S REPRESENTATIVE

- A. Arrange for the services of qualified factory service representatives from the companies manufacturing or supplying equipment and/or materials to be used or installed in the work as specified, to perform the following duties.
- B. After installation of the listed equipment has been completed and the equipment is presumably ready for operation, but before others operate it, the representative shall inspect, operate, test, and adjust the equipment. The inspection shall include but shall not be limited to, the following points as applicable:
- 1. Soundness (without cracked or otherwise damaged parts).
- 2. Completeness in all details, as specified.
- 3. Correctness of setting, alignment, and relative arrangement of various parts.
- 4. Adequacy and correctness of packing, sealing and lubricants.
- C. The operation, testing, and adjustment shall be as required to prove that the equipment is left in proper condition for satisfactory operation under the conditions specified.
- D. On completion of his work, the manufacturer's or supplier's representative shall submit in triplicate to the Engineer a complete signed report of the result of his inspection, operation, adjustments, and tests. The report shall include detailed descriptions of the points inspected, tests and adjustments made, quantitative results obtained if such are specified, and suggestions for precautions to be taken to ensure proper maintenance. The report also shall include a certificate that specifically states "the equipment conforms to the requirements of the Contract and is ready for permanent operation and that nothing in the

installation will render the manufacturer's warranty null and void".

E. After the Engineer has reviewed the reports from the manufacturer's representatives, the Contractor shall make all arrangements to have the manufacturer's representatives present when the field acceptance tests are made by the Engineer without additional cost to the Owner.

1.08 OPERATING INSTRUCTIONS AND PARTS LISTS

- A. Where reference is made in the Technical Specifications to operating instructions and spare parts lists, furnish, for each piece of equipment, six complete sets giving the information listed below:
- 1. Clear and concise instructions for the operation, adjustment, and lubrication and other maintenance of the equipment. These instructions shall include a complete lubrication chart.
- 2. List of all parts for the equipment, with catalog numbers and other data necessary for ordering replacement parts.
- B. Such instructions and parts lists shall be annotated to indicate only the specific equipment furnished. References to other sizes and types or models of similar equipment shall be deleted or neatly lined out.
- C. Such operating instructions and parts lists shall be delivered to the Engineer at the same time that the equipment to which they pertain is delivered to the site.

1.09 LUBRICANTS

A. During testing and prior to acceptance, Furnish all lubricants necessary for the proper lubrication of all equipment furnished under this Contract.

1.10 SPECIAL TOOLS

- A. For each type of equipment furnished provide a complete set of all special tools (including grease guns or other lubricating devices) which may be necessary for the adjustment, operation, maintenance, and disassembly of such equipment. Tools shall be highgrade, smooth, forged, alloy, tool steel. Grease guns shall be lever type.
- B. Special tools are considered to be those tools which because of their limited use are not normally available, but which are necessary for the particular equipment.

C. Special tools shall be delivered at the same time as the equipment to which they pertain. Properly store and safeguard such special tools until completion of the work, at which time they shall be formally transmitted and delivered to the Owner.

1.11 EQUIPMENT DRIVE GUARDS

A. All equipment driven by open shafts, belts, chains, or gears shall be provided with acceptable all-metal guards enclosing the drive mechanism. Guards shall be constructed of galvanized sheet steel or galvanized woven wire or expanded metal set in a frame of galvanized steel members. Guards shall be secured in position by steel braces or straps that will permit easy removal for servicing the equipment. The guards shall conform in all respects to all applicable safety codes and regulations.

1.12 PROTECTION AGAINST ELECTROLYSIS

A. Where dissimilar metals are used in conjunction with each other, suitable insulation shall be provided between adjoining surfaces so as to eliminate direct contact and any resultant electrolysis. The insulation shall be bituminous impregnated felt, heavy bituminous coatings, nonmetallic separators or washers, or by other acceptable materials.

1.13 COVERING EXCAVATED TRENCH

A. In addition to the requirements in Section 00700 titled Interference with and Protection of Streets. Cover all open excavations when construction operations are suspended at the end of the day, or in excavated trenches where work is not actually in progress. Cover shall be capable of withstanding AASHTO H20-S16 loading. This cover shall consist of steel plates or some other satisfactory cover of adequate size and strength suitably held in place to keep all traffic out of excavations, all as verified in writing by the Contractor. The cover shall be laid over the excavation until it is backfilled.

1.14 MAINTAINING TRENCH EXCAVATIONS

A. The length of trench opened at any time, from point where ground is being broken to completed backfill, and also the amount of space in streets or public and private lands occupied by equipment, trench, and supplies, shall not exceed the length of space considered reasonably necessary and expedient by the Engineer. In determining the length of open trench or spaces for equipment, materials, supplies and other necessities, the Engineer will consider: the nature of the lands or streets where work is being

done; types and methods of construction and equipment being used; inconvenience to the public or to private parties; possible dangers; and other proper matters. All work must be constructed with a minimum inconvenience and danger to the public and all other parties concerned.

- B. Whenever any trench obstructs pedestrian and vehicular traffic in or to any public street, private driveway or property entrance, or on private property, take such means as may be necessary to maintain pedestrian and vehicular traffic and access. Until such time as the work may have attained sufficient strength to support backfill, or if for any other reason it is not expedient to backfill the trench immediately, construct and maintain suitable plank crossing and bridges to carry essential traffic in or to the street, driveway or property in question, as specified or directed.
- C. Suitable signs, lights, and such items required by Police Authorities to direct traffic, shall be furnished and maintained by the Contractor at his own expense.
- D. Keep streets and premises free from unnecessary obstructions, debris and all other materials. The Engineer may, at any time, order all equipment, materials, surplus from excavations, debris and all other materials lying outside that length of working space, promptly removed. Should the Contractor fail to remove such material within 24 hours after notice to remove the same, the Owner may cause any part or all of such materials to be removed by such persons as he may employ, at the Contractor's expense; and may deduct the costs thereof from payments which may be or may become, due to the Contractor under the Contract. In special cases, where public safety urgently demands it, the Owner may cause such materials to be removed at the Contractor's expense without prior notice.

1.15 DISRUPTION OF STORM DRAINS

A. Portions of the Work may be located in areas that are serviced by storm drains. Take extreme precaution to minimize disruption of the drains, and repair and/or make restitution for repairs by others for all disruptions caused by the construction operations.

1.16 BLASTING AND PRE-CONSTRUCTION BLASTING SURVEY

A. Blasting will not be permitted.

1.17 NAMEPLATES

- A. With the exceptions mentioned below, each piece of equipment shall be provided with a substantial nameplate of noncorrodible metal, securely fastened in place and clearly and permanently inscribed with the manufacturer's name, model or type designation, serial number, principal rated capacities, electrical or other power characteristics, and similar information as appropriate. Coordinate nameplate text requirements with Engineer prior to fabrication. Nameplates shall be securely mounted in a readily visible location approved by the Engineer. Equipment Specification sections may contain additional information regarding nameplates.
- B. This requirement shall not apply to standard manually operated hydrants or to gate, globe, check, and plug valves.
- C. Each process valve shall be provided with a substantial tag of noncorrodible metal securely fastened in place and inscribed with an identification number in conformance with the Valve Identification Schedule indicated on the drawings or furnished later by the Engineer.

1.18 SPECIAL SAFETY PRECAUTIONS

- A. Work includes the removal and demolition of the existing chlorine disinfection system. Chlorine is an extremely active chemical, which is extremely toxic and corrosive. Chlorine must be stored and handled very carefully to avoid possible serious injuries or death to workers and the public.
- B. The existing chlorine disinfection system consists of 1 ton chlorine cylinders, which store liquid chlorine under pressure, chlorination equipment, and piping. (Under atmospheric pressure, chlorine exists in the gaseous form). The system draws liquid chlorine from the cylinders evaporates the chlorine to gaseous form and then injects the gas into a plant water line to form a chlorine solution. This solution is then transported to various points of application.
- C. Contractor shall take all necessary safety precautions in completing the work including coordinating with and complying with emergency procedures and requirements of the Owner, Police Department, Fire Department, and the Rhode Island Department of Environmental Management. The Contractor shall comply with all applicable federal, state and local laws, ordinances, rules and regulations and lawful orders of all authorities

having jurisdiction for the safety of persons and protection of property. The Contractor shall have all necessary safety apparatus on-site and workers shall be instructed in its use.

1.19 LAND, EASEMENTS, AND RIGHTS-OF-WAY

- A. As indicated, a portion of the work may be located within easements and/or rights-of-way, obtained or which will be obtained by the Owner, through private property. On all other lands, the Contractor has no rights unless he obtains them from the proper parties as specified in Section 00700, Occupying Private Land.
- B. Prior to issuance of the Notice to Proceed, the Owner shall obtain all land, easements and rights-of-way necessary for carrying out and for the completion of the work to be performed pursuant to the Contract Documents, unless otherwise mutually agreed.
- C. The Owner shall provide to the Contractor information which delineates and describes the lands owned and rights-of-way acquired.
- D. The Contractor shall provide at his own expense and without liability to the Owner any additional land and access thereto that the Contractor may desire for temporary construction facilities or for storage of equipment and materials.
- E. If however, lands, easements or rights-of-way cannot be obtained before work on the project begins, the Contractor shall begin his work upon such land, easements or rights-of-way as have been previously acquired by the Owner, and no claims for damages whatsoever will be allowed by reason of its inability to procure the lands, easements, or rights- of-way for the said work, the Contractor shall not be entitled to make or assert a claim for damages by reason of the said delay, or to withdraw from the Contract except by consent of the Owner. Time for completion of work will be extended to such time as the Owner determines will compensate for the time lost by such delay, such determination to set forth in writing.

1.20 CLEANING FINISHED WORK

A. After the work is completed, the pipes, manholes and structures shall be carefully cleaned free of debris and dirt, broken masonry, and mortar, and left in first class condition, ready to use. All temporary or excess materials shall be disposed of

off-site and the work left broom clean, to the satisfaction of the Engineer.

END OF SECTION

Appendix A

General Wage Rate Decision Davis Bacon

"General Decision Number: RI20230001 02/03/2023

Superseded General Decision Number: RI20220001

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: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an |. The contractor must pay option is exercised) on or after January 30, 2022:

- . Executive Order 14026 generally applies to the contract.
- all covered workers at least \$16.20 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 2023.

If the contract was awarded on . or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:

- Executive Order 13658 generally applies to the contract.
- . The contractor must pay all covered workers at least \$12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification Number Publication Date 0 01/06/2023 1 01/13/2023 2 02/03/2023

ASBE0006-006 06/01/2022

| Ra | ates | 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)\$ | 38.30 | 25.55 |
| ASBE0006-008 09/01/2021 | | |
| Ra | ates | Fringes |
| Asbestos Worker/Insulator Includes application of all insulating materials, protective coverings, coatings & finishes to all types of mechanical systems.\$ 4 | 45.00 | 32.89 |
| BOIL0029-001 01/01/2021 | | |
| Ra | ates | Fringes |
| BOILERMAKER\$ | 45.87 | 29.02 |
| BRRI0003-001 06/01/2022 | | |
| Ra | ates | Fringes |
| Bricklayer, Stonemason, Pointer, Caulker & Cleaner\$ | 46.86 | 29.14 |
| BRRI0003-002 09/01/2022 | | |
| Ra | ates | Fringes |
| Marble Setter, Terrazzo Worker & Tile Setter\$ | | 30.34 |
| BRRI0003-003 09/01/2022 | | |
| Ra | ates | Fringes |
| Marble, Tile & Terrazzo Finisher\$ | 38.78 | |
| CARP0330-001 01/01/2023 | | |
| Ra | ates | Fringes |
| CARPENTER (Includes Soft Floor Layer)\$4 Diver Tender\$4 DIVER\$5 | 42.53 53.88 | 29.35 29.35 29.35 PENDIX-2 |

 Piledriver
 \$ 41.53
 29.35

 WELDER
 \$ 42.53
 29.35

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 01/02/2023

| | Rates | Fringes | |
|------------|----------|---------|--|
| MILLWRIGHT | \$ 41.54 | 30.73 | |
| | | | |

ELEC0099-002 12/05/2022

Rates Fringes

ELECTRICIAN......\$ 45.86 53.26%

Teledata System Installer......\$ 34.40 12.10%+15.31

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 01/01/2023

Rates Fringes

ELEVATOR MECHANIC...........\$ 59.36 37.335+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.

FUSTORT 004 05 /04 /0000

ENGI0057-001 06/01/2022

Operating Engineer: (power plants, sewer treatment plants, pumping stations, tunnels, caissons, piers, docks, bridges, wind turbines, subterranean & other marine and heavy construction work)

| _ | | on work) | |
|---|-------|-----------|---------|
| | GROUP | 1\$ 43.55 | 29.25+a |
| | GROUP | 2\$ 41.55 | 29.25+a |
| | GROUP | 3\$ 37.17 | 29.25+a |
| | GROUP | 4\$ 34.32 | 29.25+a |
| | GROUP | 5\$ 40.60 | 29.25+a |
| | GROUP | 6\$ 31.40 | 29.25+a |
| | GROUP | 7\$ 25.40 | 29.25+a |
| | GROUP | 8\$ 37.25 | 29.25+a |
| | GROUP | 9\$ 41.17 | 29.25+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 APPENDIX-4

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.

ENGI0057-002 05/01/2022

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.....\$ 36.70 29.25+a GROUP 2.....\$ 31.40 29.25+a GROUP 3.....\$ 25.40 29.25+a GROUP 4.....\$ 31.98 29.25+a GROUP 5.....\$ 35.68 29.25+a GROUP 6.....\$ 35.30 29.25+a GROUP 7.....\$ 30.95 29.25+a GROUP 8.....\$ 32.33 29.25+a GROUP 9.....\$ 34.28 29.25+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 06/01/2022

BUILDING CONSTRUCTION

| | | Rates | Fringes |
|-------------|---------------|----------|---------|
| Power Equip | ment Operator | | |
| GROUP | 1 | \$ 42.82 | 29.25+a |
| GROUP | 2 | \$ 40.82 | 29.25+a |
| GROUP | 3 | \$ 40.60 | 29.25+a |
| GROUP | 4 | \$ 36.60 | 29.25+a |
| GROUP | 5 | \$ 33.75 | 29.25+a |
| GROUP | 6 | \$ 39.90 | 29.25+a |
| GROUP | 7 | \$ 39.47 | 29.25+a |
| GROUP | 8 | \$ 36.79 | 29.25+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

IRON0037-001 09/16/2022

| | Rates | Fringes |
|-------------------------|----------|---------|
| IRONWORKER | \$ 39.01 | 31.58 |
| LAB00271-001 05/30/2021 | | |

BUILDING CONSTRUCTION

| | | Rates | Fringes |
|---------|---|----------|---------|
| LABORER | | | |
| GROUP | 1 | \$ 33.55 | 26.15 |
| GROUP | 2 | \$ 33.80 | 26.15 |
| GROUP | 3 | \$ 34.30 | 26.15 |
| GROUP | 4 | \$ 34.55 | 26.15 |
| GROUP | 5 | \$ 35.55 | 26.15 |

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

LAB00271-002 05/30/2021

HEAVY AND HIGHWAY CONSTRUCTION

| | Rates | Fringes |
|-----------------------|----------|------------|
| LABORER | | |
| COMPRESSED AIR | | |
| Group 1 | \$ 53.45 | 24.15 |
| Group 2 | | 24.15 |
| Group 3 | | 24.15 |
| FREE AIR | | |
| Group 1 | \$ 44.05 | 24.15 |
| Group 2 | | 24.15 |
| Group 3 | | 24.15 |
| LABORER | | |
| Group 1 | \$ 33.55 | 24.15 |
| Group 2 | \$ 33.80 | 24.15 |
| Group 3 | | 24.15 |
| Group 4 | | 24.15 |
| Group 5 | \$ 35.55 | 24.15 |
| OPEN AIR CAISSON, | | |
| UNDERPINNING WORK AND | | |
| BORING CREW | | APPENDIX-7 |

| Bottom Man\$ | 39.55 | 24.15 |
|---------------------|-------|-------|
| Top Man & Laborer\$ | 38.60 | 24.15 |
| TEST BORING | | |
| Driller\$ | 40.00 | 24.15 |
| Laborer\$ | 38.60 | 24.15 |

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 06/01/2022

Rates Fringes
APPENDIX-8

| 2/27/23, 11:06 AM | | SAM.gov |
|------------------------------------------------------------------------------------------------|-----------------|----------------|
| PAINTER Brush and Roller Epoxy, Tanks, Towers, | .\$ 37.22 | 23.40 |
| Swing Stage & Structural Steel Spray, Sand & Water | .\$ 39.22 | 23.40 |
| Blasting | | 23.40 |
| Taper Wall Coverer | | 23.40 23.40 |
| PAIN0011-006 06/01/2022 | | |
| | Rates | Fringes |
| GLAZIER | .\$ 40.78 | 23.40 |
| FOOTNOTES: | | |
| SWING STAGE: \$1.00 per hour addi | tional. | |
| PAID HOLIDAYS: Labor Day & Chris | • | |
| PAIN0011-011 06/01/2022 | | |
| | Rates | Fringes |
| Painter (Bridge Work) | | 23.75 |
| 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 3 planks width and which is 20 and any offset structure: \$.30 | or more feet ab | oove ground |
| 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 | | 27.50 |
| PLUM0051-002 08/29/2022 | | |
| | | |

Rates Fringes APPENDIX-9

| Plumbers and Pipefitters | \$ 47.89 | 31.40 |
|--------------------------|----------|---------|
| ROOF0033-004 12/01/2022 | | |
| | Rates | Fringes |
| ROOFER | \$ 42.23 | 29.67 |
| SFRI0669-001 01/01/2023 | | |
| | Rates | Fringes |
| SPRINKLER FITTER | \$ 47.55 | 29.94 |
| SHEE0017-002 12/01/2020 | | |
| | Rates | Fringes |
| Sheet Metal Worker | \$ 38.58 | 36.73 |
| TEAM0251-001 05/01/2022 | | |

HEAVY AND HIGHWAY CONSTRUCTION

| | | Rates | Fringes |
|-------------|----|-------------|-------------|
| TRUCK DRIVE | :R | | |
| GROUP | 1 | \$ 28.46 | 32.10+A+B+C |
| GROUP | 2 | \$ 28.61 \$ | 32.10+A+B+C |
| GROUP | 3 | \$ 28.66 \$ | 32.10+A+B+C |
| GROUP | 4 | \$ 28.71 \$ | 32.10+A+B+C |
| GROUP | 5 | \$ 28.81 \$ | 32.10+A+B+C |
| GROUP | 6 | \$ 29.21 \$ | 32.10+A+B+C |
| GROUP | 7 | \$ 29.41 \$ | 32.10+A+B+C |
| GROUP | 8 | \$ 28.91 \$ | 32.10+A+B+C |
| GROUP | 9 | \$ 29.16 \$ | 32.10+A+B+C |
| GROUP | 10 | \$ 28.96 \$ | 32.10+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
APPENDIX-10

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.

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

https://www.dol.gov/agencies/whd/government-contracts.

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 National Office because National Office has 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.

END OF GENERAL DECISIO"

Appendix B

Federal Bid Submission - Documents

City of Warwick Office of Housing & Community Development

FEDERAL BID SUBMISSION

CERTIFICATIONS For Contracts of

\$200,000 & Over

The following documents need to be completed and submitted with original bid:

- Certification Regarding Debarment and Suspension (3 pages)
- Equal Opportunity Certification (4 pages)
- Anti-Lobbying Certification (1 page)
- Minority Contractor Participation (2 pages)
- Segregated Facilities Certification (1 page)
- Davis Bacon, Section 3, Minority & Woman Owned Business Certification (1 page)
- City of Warwick Community Development Program Affirmative action Plan for Utilizing Local Businesses (3 pages)
- Civil Rights, Employment and Contracting Opportunities and Other Federal Requirements (2 pages)
- Certification of Bidder Federal Labor Standards Provisions Davis Bacon Act and "Related Acts" (1 page)
- Section 3 Forms

As part of the final award of the contract, the contractor will be required to provide a a Unique Entity Identifier # (UEI#) and Registration from Sam.gov, completed W-9 form, and certificate of insurance. In addition, for bids that exceed \$100,000, the following bonds will be required: material and labor & performance for 100% of the contract amount.

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS PRIMARY COVERED TRANSACTIONS

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contact under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery falsification or destruction or records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1) (b) of this certification; and

such

(d) Within a three-year period preceding this application/proposal, has not had one or more public transactions (Federal, State or local) terminated for cause or default.

| Contractor's Name (printed) | Contractor Name (signature) |
|-----------------------------|-----------------------------|
| Title | License # / Registration # |
| Company Name | |

City, State, Zip Code

City, State, Zip Code

U.S. Department of Housing and Urban Development

Certification Regarding Debarment and Suspension

Certification A: Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions

- 1. The prospective primary participant certifies to the best of its knowledge and belief that its principals;
- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal debarment or agency;
- b. Have not within a three-year period preceding this proposal, been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
- d. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.
- 2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Instructions for Certification (A)

- 1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
- 2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
- 3. The certification in this clause is a material representation of fact upon which reliance was place when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

- 4. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if at any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 5. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of these regulations.
- 6. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- 7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines this eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
- 9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 10. Except for transactions authorized under paragraph (6) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

Certification B: Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Instructions for Certification (B)

- 1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
- 2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- 3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 4. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of these regulations.

- 5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- 6. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
- 8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 9. Except for transactions authorized under paragraph (5) of these instructions, if a participant in a lower covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies including suspension and/or debarment.

| pplicant | | Date |
|---------------------------------------------|-------|------|
| | | |
| Signature of Authorized Certifying Official | Title | |
| | | |

EQUAL EMPLOYMENT OPPORTUNITY PROVISIONS

I, the undersigned, understand that the following is applicable for contracts and sub-contracts that are funded in whole or in part with federal HUD funding:

I. Executive Order 11246:

Equal Employment Opportunity

Executive Order 11246, as amended by Executive Order 12066 (41 CFR Chapter 60), and the regulations at 24 CFR Part 130, which provide that no person shall be discriminated against on the basis of race, color, religion, sex or national origin in all phases of employment during the performance of HUD assisted **construction contracts**. Participating contractors and subcontractors must take affirmative action to ensure fair treatment in employment, upgrading, demotion, transfer, recruitment and recruitment advertising; layoff and termination; rates of pay and compensation; and selection for training and apprenticeship. This provision shall apply to all construction contracts of \$10,000.00 or more entered into by the Office of Housing and Community Development or Sub Recipient and specific affirmative actions including:

- A. Posting in a conspicuous place the "Equal Employment Opportunity (EEO) Poster;
- B. stating in all solicitations or advertisements for employees that all qualified applicants will receive consideration for employment without regard to race, creed, color, sex, or national origin;
- C. sending to each labor union or representative of workers with which there is a collective bargaining agreement a copy of the EEO poster for posting;
- D) and placing the "Equal Opportunity Clause" in all subcontracts for any project which exceeds \$10,000.

II. Minority Business Enterprises (MBEs) and Women Business Enterprises (WBEs)

The City of Warwick follows General Law 37-14.1 with regards to goals for MBE and WBE contracts:

A. Minority Business Enterprises are encouraged to be awarded at least 10% of the total contract amount for construction/public works projects.

The City of Warwick through the Office of Housing and Community Development encourages contractors to work with the Rhode Island Office of Diversity, Equity & Opportunity to provide opportunities for participation by minority and women owned businesses in federal HUD funded projects.

The address and telephone number of the Rhode Island Office of Diversity, Equity & Opportunity: RI Department of Administration, ODEO/Minority Business Enterprise Compliance Office, One Capitol Hill, Providence, RI 02908, Phone (401) 574-8670, email - <u>Jean.M.Heiss@doa.ri.gov</u>

The following are some suggested actions contractors or subcontractors may be able to increase the participation of MBEs and WBEs:

- a) contact the Rhode Island Office of Diversity, Equity & Opportunity: ODEO/Minority Business Enterprise Compliance Office, One Capitol Hill, Providence, RI 02908, Phone (401) 574-8670, email Jean.M.Heiss@doa.ri.gov, and request a listing of all area MBE/WBE firms.
- b) disseminate information on business opportunities for MBEs and WBEs through announcements in the local media and through local minority, women, business, professional trade groups;

| • | with the Section 3 requirements and MBE/WBE affirmative hission of required reports with each payment request. |
|-----------------------------|----------------------------------------------------------------------------------------------------------------|
| Authorized Signature | Date |
| Name (Please Print or Type) | Title |

Equal Employment Opportunity Certification

Excerpt From 41 CFR §60-1.4(b)

U.S. Department of Housing and Urban Development Office of Housing Federal Housing Commissioner **Department of Veterans Affairs**

OMB Control No. 2502-0029 (exp. 9/30/2016)

The applicant hereby agrees that it will incorporate or cause to be incorporated into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 CFR Chapter 60, which is paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to a grant, contract, loan insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, the following equal opportunity clause:

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin, such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.
- (3) The contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (4) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor.
- (5) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

- (6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (7) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, That in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work:

Provided, That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and Federally-assisted construction contracts pursuant to the Executive order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed

| Firm Name and Address | Ву |
|-----------------------|-------|
| | |
| | |
| | Title |
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| | |

upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

Excerpt from HUD Regulations

200.410Definition of term "applicant".

- (a) In multifamily housing transactions where controls over the mortgagor are exercised by the Commissioner either through the ownership of corporate stock or under the provisions of a regulatory agreement, the term "applicant" as used in this subpart shall mean the mortgagor.
- (b) In transactions other than those specified in paragraph(a) of this section, the term "applicant" as used in this subpart shall mean the builder, dealer or contractor performing the construction, repair or rehabilitation work for the mortgagor or other borrower.

200.420Equal Opportunity Clause to be included in contracts and subcontracts.

- (a) The following equal opportunity clause shall be included in each contract and subcontract which is not exempt:
 - During the performance of this contract, the contractor agrees as follows:
 - (1) The contractor will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The contractor will take affirmative action to ensured that applicants are employed, and that employees are treated during employment without regard to their race, creed, color, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of the nondiscrimination clause.
 - (2)The contractor will in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard race, creed, color, or national origin.
 - (3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided, advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notices in conspicuous places available to employees and applicants for employment.
 - (4) The contractor will comply with all provisions of Executive Order 10925 of March 6 1961, as amended, and of the regulations, and relevant orders of the President's Committee on Equal Employment Opportunity created thereby.

- (5) The contractor will furnish all information and reports required by Executive Order 10925 of March 6, 1961, as amended, and by the regulations, and orders of the said Committee, or pursuant thereto, and will permit access to his books, records, and accounts by HUD and the Committee for purposes of investigation to ascertain compliance with such regulations, and orders.
- (6) In the event of the contractor's non-compliance with the nondiscrimination clause of this contract or with any of the said regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or Federally-assisted construction contracts in accordance with procedures authorized in Executive Order 10925 of March 6, 1961, as amende, and such other sanctions may be imposed and remedies invoke s provided in the said Executive Order or by regulations, or order of the President's Committee on Equal Employment Opportunity, or as otherwise provided by law.
- (7) The contractor will include the provisions of Paragraphs(1) through (7) in every subcontract or purchase order unless exempted by regulations, or orders of the President's Committee on Equal Employment Opportunity issued pursuant to Section 303 of Executive Order 10925 of March 6, 1961, as amended, so that such provisions will be binding upon each subcontractor or vender. The contractor will take such action with respect to any subcontract or purchase orders as HUD may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vender as a result of such direction by HUD, the contractor may request the United States to enter into such litigation to protect the interests of the United States.
- (b) Except in subcontracts for the performance of construction work at the site of construction, the clause is not required to be inserted in subcontracts below the second tier. Subcontracts may incorporate by referenced to the equal opportunity clause.

200.425Modification in and exemptions from the regulations in this subpart.

- (a) The following transactions and contracts are exempt from the regulations in this subpart:
 - (1) Loans, mortgages, contracts and subcontracts not exceeding \$10,000.
 - (2) Contract and subcontracts not exceeding \$100,000 for standard commercial supplies or raw material;
 - (3)Contracts and subcontracts under which work is to be or has been performed outside the United States and where no recruitment of workers within the United States in involved. To the extent that work pursuant to such contracts is done within the United States, the equal opportunity clause shall be applicable;
 - (4) Contracts for the sale of Government property where no appreciable amount of work is involved; and
 - (5) Contracts and subcontracts for an indefinite quantity which are not to extend for ore than one year if the purchaser determines that the amounts to be ordered under any such contract or subcontract are not reasonably expected to exceed \$100,000 in the case of contracts or subcontracts for standard commercial supplies and raw materials, or \$10,000 in the case of all other contracts and subcontracts.

CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

If any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions. Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

| * APPLICANT'S ORGANIZATION | |
|---------------------------------------------------------------|----------------------|
| * PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE Prefix: | Middle Name: Suffix: |
| * SIGNATURE: | * DATE: |

CITY OF WARWICK

SCHEDULE OF PARTICIPATION MINORITY BUSINESS ENTERPRISES/WOMEN BUSINESS ENTERPRISES

TO BE COMPLETED AND SUBMITTED WITH BID

| | MBE or | Race/ | Name of Firm | Trade | Total Contract |
|-------|---------------------------|-----------|---------------------------------|---------------------------------------------------------------------------------------------------------------|------------------------|
| 1 | WBE | Ethnicity | | | Award |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |
| Opp | ortunity (C ged; and i | ODEO/Mino | rity Business Enterprise Compli | by the Rhode Island Office of Diver ance Office)/ and such SOMWBA of mediately forward written notifica | certification has not |
| | | | | required by the awarding authority, to t constitutes a breach of the contract. | o indicate the MBE/WBE |
| Gene | eral Bidder | Name: | | | |
| Autho | orized Signa | ature: | | Date: | |

MINORITY/WOMAN BUSINESS ENTERPRISES UNAVAILABILITY FORM

To be completed by General Contractor

The undersigned contractor describes below all due diligence requirements known and making every possible effort to meet the minimum requirements for Minority/Women Business Enterprises (MBE/WBE/DBE) participation and said Contractor is seeking relief from these requirements by filing this form. A minimum of 10% of the total construction contract must be awarded to MBE/WBEs.

The General Contractor shall prepare additional copies of this information form in the quantity necessary to comply with the bidding requirements.

| I, | | , |
|----------------------------------------------------------|-----------------------------------------------|---------------------------------------------------------|
| Name | | Title |
| | | , I contacted the below listed |
| General Contractor Name | Date | |
| MBE/WBE(s) requesting a bid for | Project | as an |
| \ | Project Name | |
| MBE orWBE for the provi | ision of Goods & Services or | _ Labor to accomplish: |
| Sub work of | offered to this MBE/WBE (plumbing, electrical | al, carpentry etc) |
| Name of Prospective Sub-Contractor | Address, City and State | |
| Contact was made byTelephor | ne In Person | |
| Said sub-contractor was unavailable appropriate answer): | e for work on this project or unable to | prepare a bid for the following reason(s): (check |
| () MBW/WBE/DBE Firm De | clined Job | |
| () MBE/WBE/DBE Firm offe | ered to do a job at the price of \$ | , which was |
| not acceptable because: | | · |
| () Other | | |
| The above information is accurate and co | omplete, to the best of my knowledge and be | elief. Signed under the pains and penalties of perjury. |
| Signature of Authorized Representa | ative, General Contractor | Date |

CERTIFICATION OF CONTRACTOR REGARDING SEGREGATED FACILITIES

(For Prime Contracts Exceeding \$100,000)

| Name of Prime Contractor: | |
|----------------------------------------|---------------------------------------------------------------------------------|
| Name of Finne Contractor. | |
| | |
| Project Name and Number: | |
| The undersigned hereby certifies that: | |
| | ed facilities will be maintained as required by Title VI Rights Act of 1964. |
| Contractor's Name (printed) | Contractor Name (signature) |
| Title | License # / Registration # |
| Company Name | |
| Street Address | Mailing Address (if different) |
| City. State. Zin Code | City. State. Zip Code |



Family Size

1

2

Signatory Name

Davis-Bacon Labor Relations Section 3, Minority and Woman-Owned Business Certification

Family Size

5

6

Max Annual Income

\$83,550

\$89,750

Date

The undersigned bidder/contractor certifies as part of its bid or contract that it is a Section 3 Business Concern as indicated below (check applicable box):

Max Annual Income

\$54,150

\$61,900

| | 3 | \$69,650 | 7 | \$95,950 | |
|-----------------|-----------------|----------------------------|------------------------|--------------------------------|------|
| | 4 | \$77,350 | 8 | \$102,150 | |
| | | | | | |
| | A Section 3 | Resident is defined as any | v low or very low-in | COMP Nerson | |
| | | hin the City of Warwick. I | | | |
| | | dian income based on fan | | | |
| { } | | · · | • | by 51% or more Section 3 | |
| Residents | | | | ., | |
| { } | * | Business Concern: Over 7 | 75% of the labor hou | ars performed for the business | S |
| over the | | | | • | |
| | | eriod was performed by S | | | |
| . , | | | | d AND controlled by current | |
| | | ents or residents who cur | rently live in Section | 1 8-assisted housing | |
| | | Susiness Concern | | | |
| | | | its bid or contract th | nat it is a minority-owned | |
| | | (check applicable box): | 11 710/ | | |
| { } <u>Mın</u> | | | | more by a minority resident. | |
| () I | Race: | AND Hispan | nc: Y / N | | |
| | ot a Minority-O | | | | |
| | | | its bid or contract th | nat it is a woman-owned busin | ness |
| | below (check ap | . , | 1.510/ | 1 .1 . | |
| | | siness: A business that is | owned 51% or more | e by a woman resident. | |
| { } Is no | ot a Woman-Ov | vned Business | | | |
| CERTIFIC | ATION | | | | |
| | | | | | |
| | | | | | |
| Business Nar | me | | Project Name | | |
| | | | | | |
| Business Ado | dragg | | UEI # | T ID ///CD !\ | — |
| Dusiness Auc | u1 C88 | | OEI# | Tax ID #(EIN) | |
| | | | | | |

Signature

City of Warwick Community Development Program

Affirmative Action Plan for Utilizing Local Businesses

This plan sets forth the procedures by which the City of Warwick will assure that to the greatest extent feasible contracts for work in connection with the City's Community Development Program will be awarded to business concerns which are located in or owned in substantial part by persons residing in the City of Warwick. These procedures are set forth in compliance with the rules and regulations in Part 135 of Title 24 of the Code of Federal Regulations entitled "Employment Opportunities for Businesses and Lower Income Persons in Connection with Assisted Projects" published on August 3, 1973. It is the intent of this plan that the City and its contractors follow these procedures in awarding any work financed under the City's Community Development Program.

- 1. At the beginning of each Community Development Program Year the City will prepare and make available to the public a list of contracts expected to be awarded and a description of the professional category or classification of each type of service or supplied to be provided in order to carry out the Community Development Program.
- 2. The City will prepare a list of businesses known to be located within the City which appear to be eligible to provide the services, supplies or construction work in order to determine the availability of local businesses for each contract listed in compliance with No. 1 above.
- 3. The City and its contractors shall, where feasible, award all contracts to local businesses. Reasons for awarding contracts to other firms shall be documented. Sufficient reason for awarding contracts to firms outside the City shall include non-competitive bids or the unavailability of local firms or individuals who can provide the services or supplies required.
- 4. The City and its contractors shall comply with the following procedures in order to assure that local businesses are afforded the opportunity to contract with the City or other contractors under the Community Development Program:
- (a) The Community Development Program's Affirmative Action Plan for Utilizing Local Businesses shall be inserted into all bid documents for work funded under the Community Development Program.
- b) Local businesses for the purpose of complying with these procedures shall be those located within the entire City of Warwick or owned in substantial part by residents of Warwick.
- (c) All contractors and subcontractors shall certify their intent to comply with the objectives and procedures of this plan prior to signing a contract with the City. All contracts and subcontracts will be awarded in compliance with this plan and must be approved by the City of Warwick in writing.

- (d) Opportunities or contracts under the Community Development Program shall be advertised in the metropolitan and local newspapers. A notice of the pending contract shall be posted on the site, where applicable, or in the City Hall. Notification of pending contractual opportunities shall be sent to the City's Purchasing Agent.
- (e) All contracts for more than \$1,000 shall be awarded on the basis of competitive bids in conformance with City and Federal procedures.
- (f) All bids or proposals must be accompanied by a list of all positions for employment or training by occupational category and a list of all subcontracts necessary to fulfill the contract. In addition, each bidder shall submit with the bid, a certification adopting this plan for utilizing local businesses.

City of Warwick Community Development Program

Affirmative Action Plan for Utilizing Local Businesses

| I <u>,</u> | , certify that I have read and underst | and the Community Development |
|--------------------------------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (Contractor) | - • | , , |
| under this contract shall certifying that to the great | be in conformance with its objective atest extent feasible all sub-contracts | esses and further certify that all work let out es and procedures. I understand that I am or other work let out under this contract will which are owned in substantial part by |
| Witness: | | By:(Contractor) |
| | | (Contractor) |
| | | Title: |
| | Business Address | : |
| | | |
| | | |
| | | |
| | | |
| | Dat | Δ. |

Civil Rights, Employment and Contracting Opportunities, and Other Federal Requirements

Americans with Disabilities Act or 1990 (ADA): This Act modifies and expands the Rehabilitation Act of 1973 to prohibit discrimination against Ha qualified individual with a disability" in employment and public accommodations. The ADA requires that an individual with a physical or mental impairment who is otherwise qualified to perform the essential functions of a job, with or without reasonable accommodation, be afforded equal employment opportunity in all phases of employment.

Architectural Barriers Act of 1968 (ADA)- (42 U.S.C. 4151-4157): This Act requiresthat certain buildings financed with Federal funds must be designed, constructed, or altered in accordance with standards that ensure accessibility for persons with physical disabilities. The ABA covers any building or facility financed in whole or in part with Federal funds, except privately owned residential structures. Covered buildings and facilities designed, constructed, or altered with COBO funds are subject to the ABA and must comply with the Uniform Federal Accessibility Standards.

Disadvantaged Business Enterprises (DBE): It is the policy of HUD to encourage the award of prime contracts valued at \$100,000 or more to small disadvantaged business (SOB) concerns (other than certified 8(a) firms) that are at least 51 percent owned and controlled by socially and economically disadvantaged individuals.

Fair Labor Standards Act (FLSA) as amended - **29 U.S.C. 201 et seq.:** The U.S. Department of Labor (DOL) administers and enforces the minimum wage, overtime pay, recordkeeping, and youth employment standards affecting employees in the private sectorand in Federal, State, and local governments.

Immigration Reform and Control Act (IRCA) of 1986: Employers may hire onlypersons who may legally work in the U.S. ti.e., citizens and nationals of the U.S. and aliens authorized to work in the U.S. The employer must verify the identity and employment eligibility of anyone to be hired, which includes completing the Employment Eligibility Verification Form (1-9).

Minority and Women-Owned Business Enterprises (MBE/WBE) - 24CFR Part

85.36 (e) (1): It is the policy of HUD to actively encourage contractors to take all necessary affirmative steps to assure that small and minority firms, Women's businessenterprise and labor surplus area firms as used as subcontractors when possible. A minority or women-owned small business concern is defined as owned by at least S1 percent minority group members or women.

Section 109 of Title I of the Housing and Community Development Act or 1974, as amended (42 U.S.C. S301 et. seq., particularly 42 U.S.C. 6101 et. seq., and 29 U.S.C. 794): This section provides that no person shall be excluded from participation (including employment), denied program benefits, or subject to discrimination on the basis of race, color, national origin, or sex under any program or activity funded in wholeor in part under Title I of the Act.

Section S04 of the Rehabilitation Act of 1973, as amended (implemented at 24 CFRPart 13S): It is unlawful to discriminate based on disability in federally assisted programs. This section provides that no otherwise qualified individual shall, solely by reason of his or her disability, be excluded from participation (including employment), denied program benefits, or subjected to discrimination under any program or activity receiving Federal funding assistance. Section 504 also contains design and construction accessibility provisions for multi-family dwellings developed or substantially rehabilitated for first occupancy on or after March 13, 1991.

Uniform Guidelines on Employee Selection Procedures adopted by the Equal Employment Opportunity Commission in 1978: This manual applies to employee selection procedures in the areas of hiring, retention, promotions, transfer, demotions, dismissal, and referral. It is designed to assist employers, labor organizations, employment agencies, licensing and certification boards in complying with the requirements of Federal laws prohibiting discriminatory employment.

APPENDIX B-17

Vietnam Era Veterans' Readjustment Act of 1974 (revised Jobs for Veterans Act of 2002): This Act was passed to ensure equal employment opportunity for qualified disabled veterans and veterans of the Vietnam War. Affirmative action is required in thehiring and promotion of veterans.

Violation or Breach of Contract: Contracts for more than the simplified acquisition threshold currently set at \$150,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) *as* authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

Termination for Cause and for Convenience: AH contracts in excess of \$10,000 must address termination for cause and for convenience by the non-Federal entity including themanner by which it will be effected and the basis for sett1cment.

Rights to Inventions Made Under a Contract or Agreement: If the agreement with the contractor is for the performance of experimental, developmental, or research work, including any assignment, substitution of parties, or subcontract of any type entered into for such purpose, the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Finns Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

Clean Air Act (42 U.S,C. 7401-767lq.) and the Federal Water Pollution Control Act(33 U.S.C. 1251•1387), as amended: Contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401•7671q) and the Federal Water Pollution Control Act as amended(33 U.S.C. 125 1•1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

Procurement of **Recovered Materials:** A nonfederal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory **level** of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes **energy** and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

HUD Lead-Based Paint Regulations, 24 CFR Part 3SFlood Disaster Protection Act of 1973 (P.L, 93•243)

Nondiscrimination under Title VI of the Civil Rights Act of 1964 (as Amended)

| Acknowledgment of Bidding Firm to comply with Regulations where applicable: | the above referenced Federal |
|-----------------------------------------------------------------------------|------------------------------|
| Contractor/Bidder Signature | _ |
| Print Name | _ |

Date APPENDIX B-18

CERTIFICATION OF BIDDER

FEDERAL LABOR STANDARDS PROVISIONS- DAVIS BACON ACT AND "RELATED ACTS"

This certification is required to insure that the Bidder understands that the Project or Program to which the construction work covered by any construction greater than \$2,000, is being assigned by the United States of America and that the various Federal Labor Standards Provisions, summarized in the form HUD-4010, "Federal Labor Standards Provisions" are included in any such contract, pursuant to the provisions applicable to such Federal assistance.

The Bidder certifies receipt of form HUD-4010, "Federal Labor Standards Provisions", must be included and attached to each and every construction bid document and/or construction contract greater than \$2,000, that is subject to the Davis-Bacon Act and "Related Acts."

Wage Determination – The Wage Determination applicable to this project is:

| Determination Number: | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| Modification Number: | |
| Date: | |
| A hard copy of this Determination must be included within these bi | id specifications. |
| Wage Determination Posting – Contractors and sub-contractors shall classification in a prominent and easily accessible place at the site of the workers. | |
| The undersigned is required to ensure that all specifications and/or cont determinations and the required labor standards provisions summarized Provisions. " | ** |
| Weekly Certified Payrolls – It is the responsibility of each contractor as for project work (http://www.dol.gov/whd/forms/wh347.pdf). It is the contractor) to review payrolls submitted by subcontractors to ensurunderpayments. | responsibility of the undersigned (prime |
| <u>CERTIFICATION BY B</u> | <u>BIDDER</u> |
| Name and Address of Bidder (Include ZIP Code): | |
| | |
| Name and Title of Signer (Please print or type below:) | |
| | |
| | |
| Signature | Date |

SECTION 3 AFFIRMATIVE REQUIREMENT

[For Prime and Subcontracts that exceed \$200,000]

Section 3 of the Housing and Urban Development Act of 1968 [12 U.S.C. 1701u and 24 CFR Part 75] is HUD's legislative directive for providing preference to low- and very low-income residents of the local community (regardless of race or gender), and the businesses that substantially employ these persons, for new employment, training, and contracting opportunities resulting from HUD-funded projects. As a condition of receiving HUD assistance recipients certify that they will comply with the requirements of Section 3 annually pursuant to 24 CFR 570.607(b).

Section 3 projects are those where HUD program assistance is used for housing rehabilitation, housing construction and other public construction projects that generally exceed a \$200,000 project threshold or any Section 3 project funding from HUD's Lead Hazard Control and Healthy Homes programs.

Applicability of Section 3 to Community Planning & Development Assistance:

Contractors or subcontractors on a project in excess of \$200,000 for Section 3 covered projects are required to comply with Section 3. Accordingly, the recipient must attempt to reach the **Section 3 minimum numerical goals** found at 24 CFR Part 75, Subpart C:

(1) Twenty-five (25) percent or more of the total number of labor hours worked by all workers on a Section 3 project are Section 3 workers;

<u>Section 3 Worker Labor Hours</u> = 25% Total Labor Hours

And

(2) Five (5) percent or more of the total number of labor hours worked by all workers on a Section 3 project are Targeted Section 3 workers, as defined at § 75.21.

<u>Targeted Section 3 Labor Hours</u> = 5% Total Labor Hours

Recipients that fail to meet the minimum numerical goals above bear the burden of demonstrating why it was not possible to do so. Such justifications should describe the efforts that were taken, barriers encountered, and other relevant information that will enable the Department to make a compliance determination.

Contractor Responsibilities Pursuant to Section 3

- The Prime Contractor (Over \$200,000) must submit a Section 3 plan (attached) to the Sub-Recipient outlining Section 3 hiring and employment opportunities.
- The Prime Contractor must notify all sub-contractors (Over \$200,000) of their responsibilities under Section 3
- The Prime Contractor must provide a permeant workforce breakdown of all current employees and identify those Section 3 workers that were hired within the last five years.

- The Prime Contractor must provide an estimated breakdown of potential hires for the awarded project and timeline of anticipated hiring
- Maintain records that document a **good faith effort** to utilize Section 3 workers and Target Section 3 workers as trainees and employees. (Required of both contractor and sub-contractor.) and any other qualitative efforts to comply with Section 3.

Section 3 Workers are:

HUD defines a Section 3 worker for both public housing financial assistance and Section 3 projects as a worker that meets one of the following requirements:

- The worker's income is below the income limit established by HUD for the project area.
- The worker is employed by a Section 3 business concern.
- The worker is a YouthBuild participant.

For § 75.21, Section 3 projects, a <u>Targeted Section 3 worker</u> includes any worker who is employed by a Section 3 business concern or is a Section 3 worker who is:

- Living within the service area or neighborhood of the project; or
- A YouthBuild participant.

Section 3 Businesses are:

HUD defines a Section 3 business concern as a business concern that meets one of the following requirements:

- It is at least 51 percent owned by low- or very low-income persons;
- Over 75 percent of the labor hours performed for the business are performed by low- or very low-income persons; or
- It is a business at least 51 percent owned by current public housing residents or residents who currently live in Section 8-assisted housing.

Some examples include: proof of residency in a public housing authority; proof of federal subsidies for housing, food stamps, or unemployment benefits; and payroll data or other relevant business information.

For additional information, please visit the Section 3 website at: www.hud.gov/section3.

SECTION 3 CLAUSE

All Section 3 covered contracts shall include the following clause (referred to as the "Section 3 Clause"):

- A. The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
- B. The parties to this contract agree to comply with HUD's regulations in 24 CFR Part 75, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 75 regulations.
- C. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
- D. The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR Part 75, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR Part 75. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR Part 75.
- E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected by before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR Part 75 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR Part 75.
- F. Noncompliance with HUD's regulations in 24 CFR Part 75 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

SECTION 3 AFFIRMATIVE ACTION PLAN

(Prime Contractor) [For Projects that exceed \$200,000]

_______, Contractor, agrees to implement the following specific affirmative action steps directed at increasing the utilization of Section 3 Residents' and Section 3 Business Concerns within the City of Warwick.

- A. To ascertain from the City the exact boundaries of the Section 3 Covered Project Area and where advantageous, seek the assistance of City of Warwick in preparing and implementing the affirmative action plan.
- **B.** To attempt to recruit from within the City of Warwick the necessary individuals to fill employment opportunities generated by Section 3 covered assistance through: local advertising media, signs placed at the proposed site for the project, and community organizations and public or private institutions operating within or serving the project area and providing preference for these opportunities in the following order:
 - (i) Section 3 Residents residing in the service area or neighborhood in which the Section 3 covered project is located;
 - (ii) Participants in HLJD Youthbuild Programs, and
 - (iii) Other Section 3 Residents.
- C. To maintain a list of all lower income area residents who have applied either on their own or on referral from any source, and to employ such persons, if otherwise eligible and a vacancy exists.
- **D.** To insert this Section 3 Affirmative Action Plan in all bid documents for contracts over \$200,000, and to require all bidders on subcontracts over \$200,000 to submit a Section 3 Affirmative Action Plan, including utilization goals and the specific steps planned to accomplish these goals.
- E. To ensure that subcontracts over \$200,000 which are typically let on a negotiated rather than bid basis in areas other than Section 3 covered project areas, are also let on a negotiated basis, whenever feasible, when let in a Section 3 covered project area.
- **F.** To formally contact unions, subcontractors and trade associations to secure their cooperation for this program.
- **G.** To notify Section 3 residents and Section 3 business concerns about economic opportunities generated by Section 3 covered assistance and to award Section 3 covered contracts, to the greatest extent feasible, to Section 3 business concerns in the following order of preference:
- (i) Section 3 business concerns that provide economic opportunities for Section 3 residents in the service area or neighborhood in which the Section 3 covered project is located;
 - (ii) Applicants selected to carry out HUD Youthbuild projects;
 - (iii) Other Section 3 business concerns.
 - **H.** To notify potential contractors about Section 3 requirements of this part and incorporating the Section 3 clause in all solicitations and contracts.

- I. To facilitate the training and employment of Section 3 residents and the award of contracts to Section 3 business concerns undertaking activities to reach the numerical goal established by HUD.
- J. To cooperate in obtaining the compliance of contractors and subcontractors with the requirements of Section 3.
- K To submit reports to City and HUD on the results of actions taken to provide training, jobs and contracts to Section 3 residents and Section 3 business concerns.
- L. To appoint an executive official of the company or agency as Equal Employment Opportunity Officer to coordinate the implementation of this Section 3 Affirmative Action Plan.
- M. To document utilization of Section 3 Employees on the covered project by having existing employees, and new employees, (including those of all subcontractors) from the Section 3 Area, complete the Section 3 Income Worksheet as provided by the City.
- **N.** To complete a Section 3 Utilization Report and submit said report to City of Warwick, or their designee prior to final payment for the covered project; This report will list all Section 3 Employees documented on the Section 3 Income Worksheets and be in the format provided by City.
- **O.** To maintain records, including copies of correspondence, income verification memoranda, etc., which document that all levels of the above affirmative action steps have been taken.

| CONTRACTOR CERTIFICATION: | |
|-------------------------------------------------------------------------------------------------------|------------------------------|
| As officers and representative of: | |
| 1 | (Name of Contractor) |
| On behalf of the Company, I have read and fully ag and become a party to the full implementation of t | |
| Name and Title of the Authorized Re | presentative (print or type) |
| Signature of Authorized Represen | ntative Date |



CITY OF WARWICK

FRANK J. PICOZZI, MAYOR

Section 3 Business Concern Certification

Instructions: Enter the following information and select the criteria that applies to certify yourbusiness' Section 3 Business Concern status.

| Business Informatio | n | | |
|-------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------------------------|----------------------------|
| Name of Business_ | | | |
| Address of Business | S | | |
| Name of Business C | Owner | | |
| | | | |
| | | | |
| Preferred Contact In | nformation | | |
| ☐ Same as above | | | |
| Name of Preferred Contact | | | |
| Phone Number of P. Contact | | | |
| Type of Business (se | lect from the following | options): | |
| □ Corporation | □Partnership | ☐Sole Proprietorship | □Joint Venture |
| ☐ At least 51 perce to income guideline ☐ At least 51 perce | ont of the business is ow s on page 4). nt of the business is own | ions below that applies: ned and controlled by low- or ve | |
| ☐ Over 75 percent | ntly live in Section 8-ass of the labor hours perfo on 3 workers (Refer to d | rmed for the business over the pr | rior three-monthperiod are |

OFFICE OF HOUSING & COMMUNITY DEVELOPMENT 3275 POST ROAD • WARWICK, RI 02886 • 401-738-2009

Appendix C

Community Development Block Grant Program Federal Contract Provisions

Community Development Block Grant Program

FEDERAL CONTRACT PROVISIONS

This project is funded by means of a Grant Agreement between the United States Department of Housing and Urban Development (HUD) and the City of Warwick, for the provision of Federal financial assistance under Title 1 of the Housing and Community Development Act of 1974, and any amendments or supplements thereto, and Bidders must comply with the requirements of that Act and regulations issued by the Secretary of HUD.

CONTENTS:

- □ FEDERAL CONTRACT PROVISIONS
- □ FEDERAL SECTION 3 (24 CFR 75)
- □ FEDERAL PREVAILING WAGE RATE PROVISIONS
- □ SAM.GOV REGISTRATION
- □ FEDERAL BID SUBMISSION CERTIFICATIONS/FORMS

City of Warwick Office of Housing & Community Development 3275 Post Road Warwick, RI 02886

Contact: William R. Facente, Acting Program Coordinator / Housing Officer

Phone & Email: (401) 921-9688 / william.r.facente@warwickri.com

Federal Contract Provisions (Updated June 2022)

FEDERAL CONTRACT PROVISIONS

1. TITLE VI OF THE CIVIL RIGHTS ACT OF 1964

(P.L. 88-352), as amended, (42 USC 2000d) and the requirements imposed by the Regulations of the Department of Commerce (15 CFR Part 8) issued pursuant to that

Title. In accordance, therewith no person in the United States shall, on the grounds of race, handicap, color, sex, national origin or familial status be excluded from participation in, be denied the benefits or be otherwise subjected to discrimination under any program or activity which is paid for with federal funds. The Owner further adds that there shall not be any form of discrimination by any party in any CDBG contract on the basis of familial status, sexual orientation or sex.

2. REHABILATATION ACT OF 1973

29 USC 794, Executive Order 11914, Section 504. No otherwise qualified handicapped individual shall, solely by reason of his/her handicap, be denied the benefits of, be excluded from participation in, or be subjected to discrimination under any program or activity receiving federal financial assistance.

3. SECTION 202 OF EXECUTIVE ORDER 11246

A. Activities and contracts not subject to Section 202 (Applicable to Federally assisted construction contracts and related subcontracts of \$10,000 and under.) The City of Warwick follows Rhode Island General Law 37-14.1, Minority Business Enterprises (MBEs) are targeted for participation in all procurement and construction projects and shall be awarded a minimum of ten percent (10%) of the contract's dollar amount which should be subcontracted out to construction firms owned by minorities or women, or by firms serving in the capacity of a supplier, material provider, consultant, architect or engineer. In order to ensure that the contractor and grantee have made a good faith effort to reach these goals, they are required to provide the City of Warwick documentation of their efforts to meet the goals prior to the start of construction.).

During the performance of this contract, the contractor agrees as follows:

1. The contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor shall take affirmative action to ensure that applicants for employment are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: employment upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of

Compensation; and selection for training, including apprenticeship.

- 2. The contractor shall post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this non-discrimination clause. The Contractor shall state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- 3. Contractors shall incorporate foregoing requirements in all subcontracts.
- B. Activities and contracts subject to Section 202

Applicable to Federally assisted construction contracts and related subcontracts exceeding \$10,000.

During the performance of this contract, the contractor agrees as follows:

- 1. (a) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: employment upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (b) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration without regard to race, color, religion, sex, or national origin.
- (c) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the Contract Compliance Officer advising the said labor union or workers' representative of the contractor's commitment under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (d) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (e) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Department and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (f) In the event of the contractor's noncompliance with the non-discrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (g) The contractor will include the provisions of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the Department may direct as a means of enforcing such provision, including sanctions for non-compliance. Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a

subcontractor or vendor as a result of such direction by the Department the contractor may request the United States to enter into such litigation to protect the interest of the United States.

2. The applicant hereby agrees that it will incorporate or cause to be incorporated into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 CFR Chapter 60, which is paid for in whole or in part with funds obtained from the Federal Government or borrowed on -the credit of the Federal Government pursuant to a grant, contract, loan insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, the following equal opportunity clause:

During the performance of this contract, the contractor agrees as follows:

- (a) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin, such action sham include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment notices to be provided setting forth the provisions of this nondiscrimination clause.
- (b) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor; state that all qualified applicants WM receive considerations for employment without regard to race, color, religion, sex, or national origin.
- (c) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract of understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and- applicants for employment.
- (d) The contractor will comply with all provisions of Executive, Order 11246 of September 24, 1965, and the rules, regulations, and relevant orders of the Secretary of Labor.
- (e) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for 'purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (f) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(g) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into -such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: Provided, that the applicant maparticipating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract. Or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of labor pursuant to Part IL Subpart D of the Executive order. In addition, the applicant agrees that if it fails or refuses to comply within these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

4. CERTIFICATION OF NONSEGREGATED FACILITIES AS REQUIRED BY THE MAY 19, 1967, ORDER (32 F.R. 74390 ON ELIMINATION OF SEGREGATED FACILITIES, BY THE SECRETARY OF LABOR.

Prior to the award of any construction contract or subcontract exceeding \$10,000, the Contractor shall submit signed Certification of Nonsegregated Facilities Forms for him/herself and all subcontractors.

5. THE AGE DISCRIMINATION ACT OF 1975

No person in the United States shall, on the basis of age, be excluded from participation or be denied the benefits of, or be subjected to discrimination under, any program or activity undertaken with federal funds.

6. SECTION 109 OF THE HOUSING AND COMMUNITY DEVELOPMENT ACT OF 1974

No person in the United States shall on the ground of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available under Title I of the Housing and Community Development Act of 1974.

7. SECTION 3 OF THE HOUSING AND URBAN DEVELOPMENT ACT OF 1968

Section 3 of the Housing and Urban Development Act of 1968 [12 U.S.C. 1701u and 24 CFR Part 75] is HUD's legislative directive for providing preference to low- and very low-income residents of the local community (regardless of race or gender), and the businesses that substantially employ these persons, for new employment, training, and contracting opportunities resulting from HUD-funded projects.

As a condition of receiving HUD assistance recipients certify that they will comply with the requirements of Section 3 annually pursuant to 24 CFR 570.607(b).

Applicability of Section 3 to Community Planning & Development Assistance:

Contractors or subcontractors on a project in <u>excess of \$200,000</u> for Section 3 covered projects are required to comply with Section 3. Accordingly, the recipient must attempt to reach the **Section 3** minimum numerical goals found at 24 CFR Part 75, Subpart C:

(1) Twenty-five (25) percent or more of the total number of labor hours worked by all workers on a Section 3 project are Section 3 workers;

<u>Section 3 Worker Labor Hours</u> = 25%

Total Labor Hours

And

(2) Five (5) percent or more of the total number of labor hours worked by all workers on a Section 3 project are Targeted Section 3 workers, as defined at § 75.21.

Targeted Section 3 Labor Hours = 5%

Total Labor Hours

Recipients that fail to meet the minimum numerical goals above bear the burden of demonstrating why it was not possible to do so. Such justifications should describe the efforts that were taken, barriers encountered, and other relevant information that will enable the Department to make a compliance determination.

And that this contract, or any subcontracts, must adhere to and contain what is referred to as the Section 3 Clause, and which follows in its entirety:

Section 3 Clause:

- A. The work to be performed under this contract, subcontract, memorandum of understanding, cooperative agreement, or similar legally binding agreement, is subject to the requirements of section 3 of the Housing and Urban Development Act of 1968 (Section 3). The purpose of Section 3 is to ensure, to the greatest extent feasible, that training, employment, contracting, and other economic opportunities generated by Section 3 covered financial assistance shall be directed to low- and very low-income residents of the neighborhood where the financial assistance is spent, particularly to those who are recipients of government assistance for housing, and to businesses that are either owned by low- or very low-income residents of the neighborhood where the financial assistance is spent, or substantially employ these persons.
- B. The parties to this contract, subcontract, memorandum of understanding, cooperative agreement, or similar legally binding agreement agree to comply with HUD's regulations in 24 CFR Part 75, which implement Section 3. As evidenced by execution of this contract or subcontract memorandum of understanding, cooperative agreement or similar legally binding agreement the parties certify that they are under no contractual or other impediment that would prevent them from complying with the requirements of 24 CFR Part 75.
- C. The contractor agrees to identify current employees on its payroll when the contract or subcontract was awarded who will be working on the Section 3 covered project or activity and certify that any vacant employment opportunities, including training positions, that are filled:
 - 1. After the contractor is selected; and
 - 2. With persons other than those that meet the definition of a Section 3 resident, were not filled to circumvent the contractor's Section 3 obligations.
- D. The contractor agrees to maintain records documenting Section 3 residents that were hired to work on previous Section 3 covered projects or activities that were retained by the contractor for subsequent Section 3 covered projects or activities.
- E. The contractor agrees to post signs advertising new employment, training, or Sub-contracting opportunities that will be available as a result of the Section 3 covered projects and activities in conspicuous places at the work site where potential applicants can review them.
- F. The contractor agrees to hire, to the greatest extent feasible, Section 3 residents as new hires, or provide written justification to the recipient that is consistent with 24 CFR Part 75, describing why it was unable to meet minimum numerical hiring goals, despite its efforts to comply with the provisions of this clause.
- G. The contractor agrees that in order for a Section 3 resident to be counted as a new hire, the resident must work a minimum of 50 percent of the average staff hours worked for the category of work for which they were hired throughout the duration of time that the category of work is performed on the covered project.

- H. The contractor agrees to award, to the greatest extent feasible, 10 percent of the total dollar amount of subsequent subcontracts awarded in connection with the Section 3 covered project or activity to Section 3 businesses, or provide written justification that is consistent with 24 CFR Part 75 describing why it was unable to meet that goal, despite their efforts to comply with the provisions of this clause.
- I. The contractor agrees to notify Section 3 residents and businesses about the availability of new employment, training, or contracting opportunities created as a result of the receipt of Section 3 covered financial assistance, as stipulated by the awarding agency.
- J. The contractor agrees to verify the eligibility of prospective Section 3 residents and businesses for employment, training, or subcontracting opportunities, in accordance with the recipient's policies and procedures.
- K. The contractor agrees to provide priority consideration to eligible residents and businesses in accordance with 24 CFR Part 75, as applicable.
- L. The contractor agrees to notify potential bidders on subcontracts that are associated with Section 3 covered projects and activities about the requirements of Section 3 and include this Section 3 clause in its entirety into every subcontract awarded.
- M. The contractor agrees to impose sanctions upon any subcontractor that has violated the requirements of this clause in accordance with the awarding agency's Section 3 policies and procedures.
- N. The contractor agrees to comply with all monitoring, reporting, recordkeeping, and other procedures specified by the awarding agency.
- O. If applicable, the contractor agrees to notify each labor organization or representative of workers with which the recipient, sub-recipient, or contractor has a collective bargaining or similar labor agreement or other understanding, if any, about its obligation to comply with the requirements of Section 3 and ensure that new collective bargaining or similar labor agreements provide employment, registered apprenticeship, training, subcontracting, or other economic opportunities to Section 3 residents and businesses, and to post notices in conspicuous places at the work site advising the labor union, organization, or workers' representative of the contractor's commitments under this part.
- P. Failure to comply with this clause shall result in the imposition of sanctions. Appropriate sanctions for noncompliance may include: Requiring additional certifications or assurances of compliance; termination or cancelation of the contract, subcontract, memorandum of understanding, cooperative agreement, or similar legally binding arrangement for default; refraining from entering into subsequent contracts, subcontracts, memoranda of understanding, cooperative agreements, or similar legally binding arrangement; repayment of funds, and withholding a portion of contract awards, subcontracts, memoranda of understanding, cooperative agreements, or similar legally binding arrangements.

8. LABOR STANDARDS

- A. Davis-Bacon Act as amended (40 U.S.C 276a 276a-5.) All laborers and mechanics employed by contractors or subcontractors, including employees of other governments, on construction work assisted under this contract, and subject to the provisions of the federal acts and regulations listed in this paragraph, shall be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with the Davis-Bacon Act.
- B. Contract Work Hours and Safely Standards Act (40 U.S.C. 327-333). All laborers and mechanics employed by contractors or subcontractors shall receive overtime compensation in accordance with and subject to the provisions of the Contract Work Hours and Safety Standards Act, and the contractors and subcontractors shall comply with all regulations issued pursuant to these acts and with other applicable Federal laws and regulations pertaining to labor standards.
- C. Copeland Anti-Kickback Act requires that workers be paid at least once a week, and without any deductions or rebates except permissible deductions.

9. TITLE IV OF THE LEAD BASED PAINT POISONING PREVENTION ACT

LEAD-BASED PAINT HAZARDS -The use of lead-based paint, that is any paint containing more than 1%-lead by weight, is strictly prohibited from use on any interior surface or exterior surface in any building being rehabilitated with funding from the Community Development program. Additionally, any evidence of a health hazard, which is, defined as cracking, scaling, peeling and loose lead-based paint must be treated to prevent the ingestion of the contaminated paint. It is further necessary to assume that any of the above conditions constitute an immediate or potential hazard and must be corrected using appropriate methods.

- 10. THE UNIFORM RELOCATION ASSISTANCE AND REAL PROPERTY ACQUISITION POLICIES ACT OF 1970 (P.L. 91-646 as amended), 15 CFR Part 916 including amendments thereto and regulations there under, as provided by 1. M.R.SA 901 et seq. The Contractor and Grantee will ensure that all work performed under this Agreement will be done in accordance with this act.
- 11. THE NATIONAL ENVIRONMENTAL POLICY ACT OF 1969 (P.I. 90-190); THE NATIONAL HISTORIC PRESERVATION ACT OF 1966 (80 Stat 915, 16 USC 470); AND EXECUTIVE ORDER NO. 11593 OF MAY 31, 1971.

The chief executive officer of the Grantee consents to assume the status of a responsible Federal official under the National Environmental Policy Act of 1969 (NEPA) and other provisions of Federal law, as specified in 24 CTR 58, which further the purposes of NEPA in the areas of historic preservation, noise control floodplains, coastal zones and wetlands, air quality, water quality, wildlife, endangered species, solid waste disposal, and environmental effects abroad.

The chief executive officer is authorized and consents on behalf of the Grantee and himself to accept the jurisdiction of the federal courts for the purpose of enforcement of his responsibilities as such an official.

- 12. THE FLOOD DISASTER PROTECTION ACT OF 1963 (P.L 93-234), AS AMENDED. e Grantee will fulfill any flood insurance requirements under this Act and any regulations issued there under which NOAA may issue.
- 13. ARCHITECTURAL BARRIERS ACT (P.L 90-480), 42 USC 4151, AS AMENDED, and the regulations issued or to be issued there under, prescribing standards for the design and construction of any building or facility intended to be accessible to the public or which may result in the employment of handicapped persons therein.
- 14. THE CLEAN AIR ACT AS AMENDED, 42 USC 1857 ED SEQ.9 THE FEDERAL WATER POLLUTION CONTROL ACT, AS AMENDED, 33 USC 1251 et seq. and the regulations of the Environmental Protection Agency with respect thereto, at 40 CFR Part 15, as amended from time to time. In no event shall any amount of the assistance provided under this Agreement be utilized with respect to a facility, which has given rise to a conviction under section 113(c) (1) of the Clean Air Act or section 309(c) of the Federal Water Pollution Control Act.

15. MINORITY BUSINESS ENTERPRISES

Referenced in Executive Order #11625, OMEB Circular A-102 Attachment 0 Procurement Standards. Grantees are to give priority to Minority Business Enterprises in purchase of supplies, equipment, construction, and services.

16. CDBG CERTIFICATION

Grantee shall provide any certification required under Sections 104(b), 106(d)(5) or under any other provision of Title I of the Housing and Community Development Act of

1974 as amended through 1983, including Amendments made by the Housing and Urban Rural Recovery Act of 1983, and shall comply with the terms of such certifications.

17. SECTION 319 OF PUBLIC LAW 101-121

The grantee shall comply with the requirements of Section 319 of Public Law 101-121 regarding government wide restrictions on lobbying.

SPECIAL CONDITIONS PERTAINING TO HAZARDS, SAFETY STANDARDS AND ACCIDENT PREVENTION

A. Lead-Based Paint Hazards

(Applicable to contracts for construction or rehabilitation of residential structures) The construction or rehabilitation of residential structures is subject to the HUD Lead-

Based Paint regulations, 24 CFR Part 35. The contractor and Subcontractors shall comply with the provisions for the elimination of lead-based paint hazards under sub-part B of said regulations. The Owner will be responsible for the inspections and certifications required under Section 35.14(f) thereof.

B. Use of Explosives

When the use of explosives is necessary for the prosecution of the work, the Contractor shall observe all local, state and federal laws in purchasing and handling explosives. The Contractor shall take all necessary precautions to protect completed work, neighboring property, water lines, or other underground structures. Where there is danger to structures or property from blasting, the charges shall be reduced and the material shall be covered with suitable timber, steel or rope mats. The Contractor shall notify all owners of public utility property of intention to use explosives at least eight hours before blasting is done, close to such property. Any supervision of direction of use of explosives by the Engineer does not in any way reduce the responsibility of the Contractor or his Surety for damages that may be caused by such use.

C. Danger Signals and Safely Devices

The Contractor shall make all necessary precautions to guard against damages to property and injury to persons. He shall put up and maintain in good condition, sufficient red or warning lights at night, suitable barricades and other devices necessary to protect the public. In case the Contractor fails or neglects to take such precautions, the Owner may have such lights and barricades installed and charge the cost of this work to the Contractor. Such action by the Owner does not relieve the Contractor of any liability incurred under these specifications or contract.

SECTION 3 FEDERAL REQUIREMENTS

For Contracts Exceeding \$200,000

- 1. SECTION 3 AFFIRMATIVE REQUIREMENTS
- 2. SECTION # CLAUSE
- 3. SECTION 3 AFFIRMATIVE ACTION PLAN
- 4. SECTION 3 CERTIFICATION FOR BUSINESS CONCERNS
- 5. SECTION 3 INCOME CERTIFICATION FORM
- 6. SECTION 3 UTILIZATION REPORT (SUBMITTAL REQUIRED PRIOR TO FINAL PAYMENT)

SECTION 3 AFFIRMATIVE REQUIREMENT

[For Prime and Subcontracts that exceed \$200,000]

Section 3 of the Housing and Urban Development Act of 1968 [12 U.S.C. 1701u and 24 CFR Part 75] is HUD's legislative directive for providing preference to low- and very low-income residents of the local community (regardless of race or gender), and the businesses that substantially employ these persons, for new employment, training, and contracting opportunities resulting from HUD-funded projects. As a condition of receiving HUD assistance recipients certify that they will comply with the requirements of Section 3 annually pursuant to 24 CFR 570.607(b).

Section 3 projects are those where HUD program assistance is used for housing rehabilitation, housing construction and other public construction projects that generally exceed a \$200,000 project threshold or any Section 3 project funding from HUD's Lead Hazard Control and Healthy Homes programs.

Applicability of Section 3 to Community Planning & Development Assistance:

Contractors or subcontractors on a project in excess of \$200,000 for Section 3 covered projects are required to comply with Section 3. Accordingly, the recipient must attempt to reach the **Section 3 minimum numerical goals** found at 24 CFR Part 75, Subpart C:

(1) Twenty-five (25) percent or more of the total number of labor hours worked by all workers on a Section 3 project are Section 3 workers;

<u>Section 3 Worker Labor Hours</u> = 25% Total Labor Hours

And

(2) Five (5) percent or more of the total number of labor hours worked by all workers on a Section 3 project are Targeted Section 3 workers, as defined at § 75.21.

<u>Targeted Section 3 Labor Hours</u> = 5% Total Labor Hours

Recipients that fail to meet the minimum numerical goals above bear the burden of demonstrating why it was not possible to do so. Such justifications should describe the efforts that were taken, barriers encountered, and other relevant information that will enable the Department to make a compliance determination.

Contractor Responsibilities Pursuant to Section 3

- The Prime Contractor (Over \$200,000) must submit a Section 3 plan (attached) to the Sub-Recipient outlining Section 3 hiring and employment opportunities.
- The Prime Contractor must notify all sub-contractors (Over \$200,000) of their responsibilities under Section 3
- The Prime Contractor must provide a permeant workforce breakdown of all current employees and identify those Section 3 workers that were hired within the last five years.

- The Prime Contractor must provide an estimated breakdown of potential hires for the awarded project and timeline of anticipated hiring
- Maintain records that document a **good faith effort** to utilize Section 3 workers and Target Section 3 workers as trainees and employees. (Required of both contractor and sub-contractor.) and any other qualitative efforts to comply with Section 3.

Section 3 Workers are:

HUD defines a Section 3 worker for both public housing financial assistance and Section 3 projects as a worker that meets one of the following requirements:

- The worker's income is below the income limit established by HUD for the project area.
- The worker is employed by a Section 3 business concern.
- The worker is a YouthBuild participant.

For § 75.21, Section 3 projects, a <u>Targeted Section 3 worker</u> includes any worker who is employed by a Section 3 business concern or is a Section 3 worker who is:

- Living within the service area or neighborhood of the project; or
- A YouthBuild participant.

Section 3 Businesses are:

HUD defines a Section 3 business concern as a business concern that meets one of the following requirements:

- It is at least 51 percent owned by low- or very low-income persons;
- Over 75 percent of the labor hours performed for the business are performed by low- or very low-income persons; or
- It is a business at least 51 percent owned by current public housing residents or residents who currently live in Section 8-assisted housing.

Some examples include: proof of residency in a public housing authority; proof of federal subsidies for housing, food stamps, or unemployment benefits; and payroll data or other relevant business information.

For additional information, please visit the Section 3 website at: www.hud.gov/section3.

SECTION 3 CLAUSE

All Section 3 covered contracts shall include the following clause (referred to as the "Section 3 Clause"):

- A. The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
- B. The parties to this contract agree to comply with HUD's regulations in 24 CFR Part 75, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 75 regulations.
- C. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
- D. The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR Part 75, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR Part 75. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR Part 75.
- E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected by before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR Part 75 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR Part 75.
- F. Noncompliance with HUD's regulations in 24 CFR Part 75 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

SECTION 3 AFFIRMATIVE ACTION PLAN

(Prime Contractor) [For Projects that exceed \$200,000]

_______, Contractor, agrees to implement the following specific affirmative action steps directed at increasing the utilization of Section 3 Residents' and Section 3 Business Concerns within the City of Warwick.

- A. To ascertain from the City the exact boundaries of the Section 3 Covered Project Area and where advantageous, seek the assistance of City of Warwick in preparing and implementing the affirmative action plan.
- **B.** To attempt to recruit from within the City of Warwick the necessary individuals to fill employment opportunities generated by Section 3 covered assistance through: local advertising media, signs placed at the proposed site for the project, and community organizations and public or private institutions operating within or serving the project area and providing preference for these opportunities in the following order:
 - (i) Section 3 Residents residing in the service area or neighborhood in which the Section 3 covered project is located;
 - (ii) Participants in HLJD Youthbuild Programs, and
 - (iii) Other Section 3 Residents.
- C. To maintain a list of all lower income area residents who have applied either on their own or on referral from any source, and to employ such persons, if otherwise eligible and a vacancy exists.
- **D.** To insert this Section 3 Affirmative Action Plan in all bid documents for contracts over \$200,000, and to require all bidders on subcontracts over \$200,000 to submit a Section 3 Affirmative Action Plan, including utilization goals and the specific steps planned to accomplish these goals.
- E. To ensure that subcontracts over \$200,000 which are typically let on a negotiated rather than bid basis in areas other than Section 3 covered project areas, are also let on a negotiated basis, whenever feasible, when let in a Section 3 covered project area.
- **F.** To formally contact unions, subcontractors and trade associations to secure their cooperation for this program.
- **G.** To notify Section 3 residents and Section 3 business concerns about economic opportunities generated by Section 3 covered assistance and to award Section 3 covered contracts, to the greatest extent feasible, to Section 3 business concerns in the following order of preference:
- (i) Section 3 business concerns that provide economic opportunities for Section 3 residents in the service area or neighborhood in which the Section 3 covered project is located;
 - (ii) Applicants selected to carry out HUD Youthbuild projects;
 - (iii) Other Section 3 business concerns.
 - **H.** To notify potential contractors about Section 3 requirements of this part and incorporating the Section 3 clause in all solicitations and contracts.

- I. To facilitate the training and employment of Section 3 residents and the award of contracts to Section 3 business concerns undertaking activities to reach the numerical goal established by HUD.
- **J.** To cooperate in obtaining the compliance of contractors and subcontractors with the requirements of Section 3.
- K To submit reports to City and HUD on the results of actions taken to provide training, jobs and contracts to Section 3 residents and Section 3 business concerns.
- L. To appoint an executive official of the company or agency as Equal Employment Opportunity Officer to coordinate the implementation of this Section 3 Affirmative Action Plan.
- **M.** To document utilization of Section 3 Employees on the covered project by having existing employees, and new employees, (including those of all subcontractors) from the Section 3 Area, complete the Section 3 Income Worksheet as provided by the City.
- **N.** To complete a Section 3 Utilization Report and submit said report to City of Warwick, or their designee prior to final payment for the covered project; This report will list all Section 3 Employees documented on the Section 3 Income Worksheets and be in the format provided by City.
- **O.** To maintain records, including copies of correspondence, income verification memoranda, etc., which document that all levels of the above affirmative action steps have been taken.

| CONTRACTO | OR CERTIFICATION: | |
|-------------|-----------------------------------------------------------------------------------------------------------------|-----------------|
| As officers | and representative of:(Name of Con | itractor) |
| | of the Company, I have read and fully agree to the Sec e a party to the full implementation of this program. | • |
| | Name and Title of the Authorized Representative | (print or type) |
| | Signature of Authorized Representative | Date |

SECTION 3 UTILIZATION REPORT

(To be Completed by contractors and subs for all Projects at or Exceeding \$200,000)

| A. SECTION 3 EMPLOYEE LABOR INFORMATION | | | | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|
| Name of Contractor: | | | | | | | |
| Name of Project: | | | | | | | |
| Total number of Labor Hours on the project | | | | | | | |
| Total number of Section 3 Labor Hours on the project=% of total labor hours. | | | | | | | |
| Number of Section 3 Employees Utilized on Project by Prime Contractor: | | | | | | | |
| Number of Section 3 Employees Utilized on Project by Subcontractors: | | | | | | | |
| Total Number of Section 3 Employees Utilized on Project: | | | | | | | |
| B. CERTIFICATION OF PRIME CONTRACTOR | | | | | | | |
| As officer and representative of: Name of Prime Contractor | | | | | | | |
| | | | | | | | |
| Address: | | | | | | | |
| Telephone Number: | | | | | | | |
| On behalf of the Company, I hereby certify that the above information is true and accurate and is reported fully as required by the Section 3 Affirmative Action Plan as part of the contract for this CDBG assisted construction project. It is further understood that final payment from the City of Warwick for this project cannot be made until this Report is submitted to the City. | | | | | | | |
| Name and Title of Authorized Representative (print or type) | | | | | | | |
| Signature of Authorized Representative Date | | | | | | | |

TARGETED SECTION 3 AND SECTION 3 WORKER TRACKING FORM

| Name of Employee INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) | Worker Classification | Targeted Section 3 Workers | Section 3 Workers | Labor Hours Worked |
|---------------------------------------------------------------------------------------------------|--------------------------|----------------------------------|----------------------|-----------------------|
| | | Yes or No | Yes or No | |
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DIRECTIONS FOR COMPLETION OF SECTION 3 UTILIZATION REPORT

(For Projects at or Exceeding \$200,000)

- 1. Determine the level Section 3 participation in the construction project.
- a. All employees of the General Contractor and all employees of any and all subs must fill out the one-page Section 3 Income Worksheet and return it to you. If you hire new_employees who new_employees who new_employees work on the CDBG project, have them complete the one-page Section 3 Income Worksheet and return it to you. Compare the Worksheet to the Section 3 Income Schedule provided you at the pre-construction conference to determine if the employee is Section 3 eligible.
- b. Distribute copies of the Section 3 Income Worksheet to <u>all</u> subcontractors you engage for the project. All employees of any and all subs must fill out the one-page Section 3 Income Worksheet and return it to you. Instruct all subs to have any <u>new</u> employees they hire who <u>reside in the county where the construction is taking place</u> complete the worksheet and have the subcontractors return the forms to you. Compare as in (a.), above to determine Section 3 eligibility.
- 2. Retain all Section 3 Income Worksheets with your project records.
- 3. Complete (A) Section 3 Employee Information area of the report.
 - a. Enter name of the Contractor.
 - b. Enter project name.
 - c. Enter the total number of labor hours on the project.
 - e. Enter the number of Section 3 labor hours on the project and calculate what percentage it is of the total labor hours on the project (using the number entered in d)
 - f. Enter number of Section 3 Employees you utilized on project.
 - g. Enter number of Section 3 Employees utilized by subcontractors on project
 - h. Enter total number (f + g) of Section 3 Employees utilized on project
- 4. Complete (B) Certification by Prime Contractor area of Report
 - a. List your name, address and telephone number of your company.
 - b. Print or type name and title of authorized company representative.
 - c. Have authorized representative sign and date Report.



CITY OF WARWICK

FRANK J. PICOZZI, MAYOR

Section 3 Business Concern Certification

Instructions: Enter the following information and select the criteria that applies to certify yourbusiness' Section 3 Business Concern status.

| Business Informatio | on | | |
|------------------------------------------------------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------|
| Name of Business_ | | | |
| Address of Busines | ss | | |
| Name of Business | Owner | | |
| | | | |
| | | | |
| | | | |
| Preferred Contact I | nformation | | |
| ☐ Same as above | | | |
| Name of Preferred Contact | | | |
| Phone Number of F Contact | | | |
| · · | elect from the following □Partnership | options): □Sole Proprietorship | □Joint Venture |
| ☐ At least 51 perc (Refer to income gr ☐ At least 51 perce | ent of the business is ow uidelines on page 4). | ions below that applies: ned and controlled by low- or ver ned and controlled by current pub- assisted housing. | • |
| | | rmed for the business over the pr | rior three-month period |

Business Concern Affirmation

I affirm that the above statements are true, complete, and correct to the best of my knowledge and belief. I understand that businesses who misrepresent themselves as Section 3 business concerns and report false information to the City of Warwick and their Subrecipient may have their contracts terminated as default and be barred from ongoing and future considerations for contracting opportunities. I hereby certify, under penalty of law, that the following information is correct to the best of my knowledge.

| Print Name: | |
|--------------------------------------------|------------------------------------------------|
| Signature: | Date: |
| Information regarding Section 3 Busin | ness Concerns can be found at 24 CFR 75.5 |
| | FOR ADMINISTRATIVE USE |
| Is the business a Section 3 bus YES NO | siness concern based upon their certification? |
| EMPLOYERS MUST RET | AIN THIS FORM IN THEIR SECTION 3 COMPLIANCE |

The City of Warwick Eligibility Guidelines Section 3 Worker

The worker's income must be at or below the amount provided below for an individual(household of 1) regardless of actual household size.

Individual Income Limits

| Income Category | FY 2022 Income Limits |
|----------------------------|-----------------------|
| Extremely Low Income (30%) | \$20,300 |
| Very Low Income (50%) | \$33,850 |
| Low Income (80%) | \$54,150 |

See https://www.huduser.gov/portal/datasets/il.html for most recent income limits.

Section 3 Worker Definition:

- A low or very low-income resident (the worker's income for the previous or annualized calendar year is below the 80% income limit established by HUD); or
- Employed by a Section 3 business concern; or
- A Youth Build participant.

Targeted Section 3 Worker Definition:

- Employed by a Section 3 business concern or
- Currently meets or when hired met at least one of the following categories as documented withinthe past five years:
 - Living within the service area or the neighborhood of the project, as defined in 24CFR 75.5
 - A Youth Build participant.



CITY OF WARWICK

FRANK J. PICOZZI, MAYOR

Section 3 Worker Self-Certification

The purpose of HUD's Section 3 program is to provide employment, training and contracting opportunities to low-income individuals, particularly those who are recipients of government assistance for housing or other public assistance programs. Your response is voluntary, confidential, and has no effect on your employment.

Eligibility for Section 3 Worker or Targeted Section 3 Worker Status

A Section 3 worker seeking certification shall self-certify and submit this form to the recipient contractor or subcontractor, that the person is a Section 3 worker or Targeted Section 3 Worker as defined in 24 CFR Part 75.

Instructions: Enter/select the appropriate information to confirm your Section 3 worker or Targeted Section 3 Workerstatus.

| Employ | yee Name: | | | | | | | | | | |
|-----------------------------------------------------------------------------------------------|------------------------------------|----------|---------------------------------------------------------|--------|-----------------|--|--|--|--|--|--|
| 1. Are you a resident of public housing or a Housing Choice VoucherHolder (Section 8)? □YES □ | | | | | | | | | | | |
| 2. 3. | | | | | | | | | | | |
| | s than \$10,000 | | \$30,001 - \$40,000 | □ More | e than \$60,000 | | | | | | |
| | ,001 - \$20,000 ,001 - \$30,000 | | \$40,001 - \$50,000 \$50,001 - \$60,000 | | | | | | | | |
| Select 1 | from <i>ONE</i> of the f | followin | g two options below: | | | | | | | | |
| I qualif | y as a: | | | | | | | | | | |
| | ` | | on page 4 of Section 3 World defined on pages 4-5 of Se | | * | | | | | | |

Employee Affirmation

| Employee Address. | |
|-------------------------------------------|---------------------------------------------------|
| Print Name: | Date Hired: |
| Signature: | Date: |
| FOR | ADMINISTRATIVE USE |
| Is the employee a Section 3 worker based | upon their self-certification? ☐YES ☐NO |
| Is the employee a Targeted Section 3 work | ker based upon their self-certification? ☐YES ☐NO |
| Was this an applicant who was hired as | a result of the Section 3 project? |
| If Yes, what is the name of the company | y? |
| What was the date of hire? | |

The City of Warwick Eligibility Guidelines Section 3 Worker

The worker's income must be at or below the amount provided below for an individual(household of 1) regardless of actual household size.

Individual Income Limits

| Income Category | FY 2022 Income Limits |
|----------------------------|-----------------------|
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| Low Income (80%) | \$54,150 |

See https://www.huduser.gov/portal/datasets/il.html for most recent income limits.

Section 3 Worker Definition:

- A low or very low-income resident (the worker's income for the previous or annualized calendar year is below the 80% income limit established by HUD); or
- Employed by a Section 3 business concern; or
- A Youth Build participant.

Targeted Section 3 Worker Definition:

- Employed by a Section 3 business concern or
- Currently meets or when hired met at least one of the following categories as documented withinthe past five years:
 - Living within the service area or the neighborhood of the project, as defined in 24CFR 75.5
 - A Youth Build participant.



CITY OF WARWICK

Family Size

Signatory Name

FRANK J. PICOZZI, MAYOR

Max Annual Income

Davis-Bacon Labor Relations Section 3, Minority and Woman-Owned Business Certification

Family Size

Max Annual Income

Date

The undersigned bidder/contractor certifies as part of its bid or contract that it is a Section 3 Business Concern as indicated below (check applicable box):

| | 1 | \$54,150 | 5 | \$83,550 | | | | | | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------------------------|------------------------|-------------------------------|-----|--|--|--|--|--|--|--|--|
| | 2 | \$61,900 | 6 | \$89,750 | | | | | | | | | |
| | 3 | \$69,650 | 7 | \$95,950 | | | | | | | | | |
| | 4 | \$77,350 | 8 | \$102,150 | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | Resident is defined as an | | | | | | | | | | | |
| | _ | in the City of Warwick. | | ed at 80% of | | | | | | | | | |
| the area median income based on family size. Category 1 Business Concern: A business that is owned by 51% or more Section 3 | | | | | | | | | | | | | |
| { } D = 11 = 4 | | usiness Concern: A bus | iness that is owned b | by 51% or more Section 3 | | | | | | | | | |
| Residents | | i | 750/ - 641 1-1 1 | | | | | | | | | | |
| {} | Category 2 B | usiness Concern: Over | 15% of the labor hou | rs performed for the business | | | | | | | | | |
| over the | 41 | : | antian 2 Wantana O | D | | | | | | | | | |
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| | | nts or residents who cur | | | | | | | | | | | |
| | a Section 3 Bus | | rentry five in Section | 1 6-assisted flousing | | | | | | | | | |
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| { } Is not | a Minority-Ow | | no. 1714 | | | | | | | | | | |
| | | | its bid or contract th | at it is a woman-owned busine | ess | | | | | | | | |
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| | | ness: A business that is o | owned 51% or more | by a woman resident. | | | | | | | | | |
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Signature



Section 3 New Rule - 24 CFR 75

About Section 3

Section 3 is not just a grantee "requirement." It's a path toward economic uplift and self-sufficiency

The Section 3 program requires that recipients of certain HUD funding, to the greatest extent possible, provide training, employment, contracting and other economic opportunities to low- and very low-income persons, especially those living in federally subsidized housing, and to businesses that provide economic opportunities to low- and very low-income persons.

The intent of Section 3 is to promote economic uplift and self-sufficiency among low-income persons, level the playing field for Section 3 residents/workers and businesses and strengthen local economies. Section 3 is not about compliance. It's about investing in good partners for an economic benefit and giving them the opportunity to benefit with you.

Section 3 Final Rule

Section 3 has been around almost as long as HUD has existed. As part of the ladder into economic uplift and self-sufficiency, the rule was revised September 28, 2020.

The Section 3 new rule will allow more HUD-assisted households to secure long-term employment and put them on a path towards economic uplift and self-sufficiency.

The final rule seeks to improve effectiveness by:

Promoting sustained employment and career development
Aligning reporting with standard business practices
Changing thresholds for Section 3-covered assistance

Section 3 Worker

What is a Section 3 Worker?

Section 3 worker means any resident who fits one of the following categories:

- A worker whose income for the previous or annualized calendar year is below the income limit established by HUD
- Employed by a Section 3 business concern
- A YouthBuild participant

Targeted Section 3 Worker

What is a Targeted Section 3 Worker?

Targeted Section 3 is a Section 3 worker who is also:

- A worker employed by a Section 3 business concern
- A worker who currently is or who was when hired by the worker's current employer, as documented within the past five years:
 - o Public Housing resident or HCV participant
 - o Resident of other housing assisted by the PHA or in the PHA's property management portfolio
 - Living within the service area or the neighborhood of the project; or
 - o A YouthBuild participant

Section 3 Business

What is a Section 3 Business?

Section 3 business means any business that meets at least one of the following criteria, documented within the last six-month period:

- 51% or more owned and controlled by low-very lowmcome persons
- 75% or more labor hours are performed by low or very low-income persons
- 51 % or more owned and controlled by current residents of public housing or HCV assisted housing

The final rule changes the definition of a Section 3 business by focusing on how many hours employees work rather than number of employees. Rather than limiting businesses to low- or very low-income residents of the metropolitan statistical area where Section 3 funds are spent, it emphasizes low- or very-low income persons, including those living in public housing or Section 8.

The rule focuses on tracking and reporting of labor hours instead of new hires. The focus on labor hours would measure total actual employment and the proportion of the total employment performed by low- and very low-income workers. In addition, the focus on labor hours emphasizes continued employment.

New Rule Benchmarks

The new Section 3 performance benchmarks are still under consideration by HUD and will be published in the near future.

Opportunity Portal

Helps match Section 3 workers to jobs and training opportunities, and Section 3 businesses to contracting opportunities.

https://hudapps.hud.gov/OpportunityPortal/

Business Registry

A listing of firms that have self-certified that they meet one of the regulatory definitions of a Section 3 business and are included in a searchable online database that can be used by agencies that receive HUD funds, developers, contactors and others to facilitate the awareness of certain HUD-funded contracts.

https://portalapps.hud.gov/Sec3BusReg/BRegistry/BRegistryHome



Section 3 Business Registry and Opportunity Portal

Frequently Asked Questions

What is Section 3

Section 3 is a provision of the Housing and Urban Development Act of 1968. The purpose of Section 3 is to ensure that preference for employment, training and contacting opportunities generated from the expenditure of certain HUD funds is directed to local low- and very low-income persons, particularly those who receive federal housing assistance, and businesses that are owned by or substantially employ such persons.

Section 3 Opportunity Portal

The Section 3 Opportunity Portal is intended to help HUD grantees and Section 3 businesses meet their Section 3 obligations for employment and contracting. The site is to be used by either Section 3 workers or employers. Section 3 residents may use the site to search for Jobs and post their profile/employment history for companies to search. Employers may use the site for posting jobs/contract opportunities or search for residents to fill positions.

https://hudapps.hud.gov/OpportunityPortal/

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HUD's Section 3 Business Registry

The Section 3 Business Registry is a registry of businesses that have self-certified their status as Section 3 businesses. Businesses who self-certify that they meet one of the regulatory definitions of a Section 3 business will be included in a searchable online database. The database can be used by agencies that receive HUD funds, developers, contractors, and others to facilitate the award of covered construction and non-construction contracts to Section 3 businesses. Section 3 workers are also encouraged to use the registry to identify businesses that may have HUD-funded employment opportunities.

https://portalapps.hud.gov/Sec3BusReg/BRegistry/BRegistryHome

How does my firm submit a self-certification application for Section 3?

www.hud.gov/Sec3Biz

When does a business certification expire?

Businesses must recertify after 3 years

Where do I find the database of businesses that have self-certified for Section 3?

www.hud.gov/Sec3Biz

How can I change or update my contact information?

Email: Sec3biz@hud.gov

Business Registry Required Documentation

For inclusion in the registry, businesses must submit the online application and are not initially required to submit any additional documentation to HUD. Additional documentation may be requested if HUD receives complaints alleging that any business in its registry has misrepresented their firm's status to the Department. Businesses may also be required to submit supporting documentation as evidence of their eligibility to recipients prior to the award of the HUD-funded contract.

Verification of Business Authenticity

While the Department maintains the business registry database, it has not verified the information submitted by the businesses and does not endorse the services they provide. Accordingly, it is recommended that users perform due diligence before awarding contacts to businesses that have self-certified their status as a Section 3 business.

The Department will periodically conduct random audits of the Section 3 businesses in its registry.

Are Section 3 Businesses Automatically Entitled to HUD-funded Contracts?

Section 3 businesses are not entitled to a contract simply by being listed in the HUD Section 3 Business Registry Database. Section 3 businesses may need to demonstrate to the satisfaction of the recipient agency (i.e., Public Housing Authority, local government agency, developer, etc.) that they are a responsible bidder with the ability to perform successfully under the terms and the conditions of prospective contracts.

The Section 3 regulation at 24 CFR Part 135.36 provides preference to Section 3 businesses that submit responsible bids for contracts and subcontracts, but does not guarantee the award of contracts.

Will My Business Be Contacted After it is Listed on the Section 3 Business Registry?

HUD grantees and their developers required to do so. Businesses should proactively reach out to recipients or area or Nonmetropolitan Country.

for contracts, but they are not covered HUD funding in their metropolitan

How to Report a Firm That is Not Section 3

The Department strongly encourages anyone that believes that a firm in this registry does not meet the eligibility criteria of a Section 3 business to notify the HUD Office ofInspector General at http://www.hudoig.gov/report-fraud. HUD's Office of Inspector General is responsible for investigating claims of fraudulence. In such situations, the HUD Office ofInspector General may request documentation and additional information from the business to verify that they qualify for inclusion in the database. Businesses found to have misrepresented themselves will be removed from the database and penalized as appropriate by the HUD Office of Inspector General.



Wage and Hour Division

Instructions For Completing Payroll Form, WH-347

o <u>WH-347</u> (PDF)

0MB Control No. 1235-0008, Expires 07/31/2024.

General: Form WH-347has been made available for the convenience of contractors and subcontractors required by their Federal or Federally-aided construction-type contracts and subcontracts to submit weekly payrolls. Properly filled out, this form will satisfy the requirements of Regulations, Parts 3 and 5 (29 C.F.R., Subtitle A), as to payrolls submitted in connection with contracts subject to the Davis-Bacon and related Acts.

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) requires contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) Regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Under the Davis-Bacon and related Acts, the contractor is required to pay not less than prevailing wage, including fringe benefits, as predetermined by the Department of Labor. The contractor's obligation to pay fringe benefits may be met either by payment of the fringe benefits to bona fide benefit plans, funds or programs or by making payments to the covered workers (laborers and mechanics) as cash in lieu of fringe benefits.

This payroll provides for the contractor to show on the face of the payroll all monies to each worker, whether as basic rates or as cash in lieu of fringe benefits, and provides for the contractor's representation in the statement of compliance on the payroll (as shown on page 2) that he/she is paying for fringe benefits required by the contract and not paid as cash in lieu of fringe benefits. Detailed instructions concerning the preparation of the payroll follow:

Contractor or Subcontractor: Fill in your firm's name and check appropriate box.

Address: Fill in your firm's address.

Payroll No.: Beginning with the number "I", list the payroll number for the submission.

For Week Ending: List the workweek ending date.

Project and Location: Self-explanatory.

Project or Contract No.: Self-explanatory.

Column 1- Name and Individual Identifying Number of Worker: Enter each worker's full name and an individual identifying number (e.g., last four digits of worker's social security number) on each weekly payroll submitted.

Column 2- No. of Withholding Exemptions: This column is merely inserted for the employer's convenience and is not a requirement of Regulations, Part 3 and 5.

Column 3 - Work Classifications: List classification descriptive of work actually performed by each laborer or mechanic. Consult classification and minimum wage schedule set forth in contract specifications. If additional classifications are deemed necessary, see Contracting Officer or Agency representative. An individual may be shown as having worked in more than one classification provided an accurate breakdown or hours worked in each classification is maintained and shown on the submitted payroll by use of separate entries.

Column 4 - Hours worked: List the day and date and straight time and overtime hours worked in the applicable boxes. On all contracts subject to the Contract Work Hours Standard Act, enter hours worked in excess of 40 hours a week as "overtime".

Column 5 - Total: Self-explanatory

Column 6 - Rate of Pay (Including Fringe Benefits): In the "straight time" box for each worker, list the actual hourly rate paid for straight time worked, plus cash paid in lieu of fringe benefits paid. When recording the straight time hourly rate, any cash paid in lieu of fringe benefits may be shown separately from the basic rate. For example, "\$12.25/.40" would reflect a \$12.25 base hourly rate plus \$0.40 for fringe benefits. This is of assistance in correctly computing overtime. See "Fringe Benefits" below. When overtime is worked, show the overtime hourly rate paid plus any cash in lieu of fringe benefits paid in the "overtime" box for each worker; otherwise, you may skip this box. See "Fringe Benefits" below. Payment of not less than time and one-half the basic or regular rate paid is required for overtime under the Contract Work Hours Standard Act of 1962 if the prime contract exceeds \$100,000. In addition to paying no less than the predetermined rate for the classification which an individual works, the contractor must pay amounts predetermined as fringe benefits in the wage decision made part of the contract to approved fringe benefit plans, funds or programs or shall pay as cash in lieu of fringe benefits. See "FRINGE BENEFITS" below.

Column 7 - Gross Amount Earned: Enter gross amount earned on this project. If part of a worker's weekly wage was earned on projects other than the project described on this payroll, enter in column 7 first the amount earned on the Federal or Federally assisted project and then the gross amount earned during the week on all projects, thus "\$163.00/\$420.00" would reflect the earnings of a worker who earned \$163.00 on a Federally assisted construction project during a week in which \$420.00 was earned on all work.

Column 8 - Deductions: Five columns are provided for showing deductions made. If more than five deduction are involved, use the first four columns and show the balance deductions under "Other" column; show actual total under "Total Deductions" column; and in the attachment to the payroll describe the deduction(s) contained in the "Other" column. All deductions must be in accordance with the provisions of the Copeland Act Regulations, 29 C.F.R., Part 3. If an individual worked on other jobs in addition to this project, show actual deductions from his/her weekly gross wage, and indicate that deductions are based on his gross wages.

Column 9 - Net Wages Paid for Week: Self-explanatory.

Totals - Space has been left at the bottom of the columns so that totals may be shown if the contractor so desires.

Statement Required by Regulations, Parts 3 and 5: While the "statement of compliance" need not be notarized, the statement (on page 2 of the payroll form) is subject to the penalties provided by 18 U.S.C. § 1001, namely, a fine, possible imprisonment of not more than 5 years, or both. Accordingly, the party signing this statement should have knowledge of the facts represented as true.

Items land 2:Space has been provided between items (1) and (2) of the statement for describing any deductions made. If all deductions made are adequately described in the "Deductions" column above, state "See Deductions column in this payroll." See "FRINGE BENEFITS" below for instructions concerning filling out paragraph 4 of the statement.

Item 4 FRINGE BENEFITS - Contractors who pay all required fringe benefits: If paying all fringe benefits to approved plans, funds, or programs in amounts not less than were determined in the applicable wage decision of the Secretary of Labor, show the basic cash hourly rate and overtime rate paid to each worker on the face of the payroll and check paragraph 4(a) of the statement on page 2 of the WH-347 payroll form to indicate the payment. Note any exceptions in section 4(c).

Contractors who pay no fringe benefits: If not paying all fringe benefits to approved plans, funds, or programs in amounts of at least those that were determined in the applicable wage decision of the Secretary of Labor, pay any remaining fringe benefit amount to each laborer and mechanic and insert in the "straight time" of the "Rate of Pay" column of the payroll an amount not less than the predetermined rate for each classification plus the amount of fringe benefits determined for each classification in the application wage decision. Inasmuch as it is not necessary to pay time and a half on cash paid in lieu of fringe benefits, the overtime rate shall be not less than the sum of the basic predetermined rate, plus the half time premium on basic or regular rate, plus the required cash in lieu of fringe benefits at the straight time rate. In addition, check paragraph 4(b) of the statement on page 2 the payroll form to indicate the payment of fringe benefits in cash directly to the workers. Note any exceptions in section 4(c).

Use of Section 4(c), Exceptions

Any contractor who is making payment to approved plans, funds, or programs in amounts less than the wage determination requires is obliged to pay the deficiency directly to the covered worker as cash in lieu of fringe benefits. Enter any exceptions to section 4(a) or 4(b) in section 4(c). Enter in the Exception column the craft, and enter in the Explanation column the hourly amount paid each worker as cash in lieu of fringe benefits and the hourly amount paid to plans, funds, or programs as fringe benefits. The contractor must pay an amount not less than the predetermined rate plus cash in lieu of fringe benefits as shown in section 4(c) to each such individual for all hours worked (unless otherwise provided by applicable wage determination) on the Federal or Federally assisted project. Enter the rate paid and amount of cash paid in lieu of fringe benefits per hour in column 6 on the payroll. See paragraph on "Contractors who pay no fringe benefits" for computation of overtime rate.

Public Burden Statement: We estimate that it will take an average of 55 minutes to complete this collection of information, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection of information, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W., Washington, D.C. 20210.

Note: In order to view, fill out, and print PDF forms, you need Adobe®Acrobat®Reader®version 5 or later, which you may download for free at www.adobe.com/products/acrobat/readstep2.htm1.

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U.S. Department of Labor

PAYROLL

Wage and Hour Division

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)

U.S. Wage and Hour Division

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| Date | (b) WHERE FRINGE BENEFITS ARE PAID IN CASH — Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below. | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--|
| I,(Name of Signatory Party) (Title) do hereby state: | | | |
| (1) That I pay or supervise the payment of the persons employed by | (c) EXCEPTIONS | | |
| on the (Contractor or Subcontractor) | EXCEPTION (CRAFT) | EXPLANATION | |
| ; that during the payroll period commencing on the (Building or Work) | | | |
| day of, and ending theday of, | | | |
| all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said | | | |
| from the full (Contractor or Subcontractor) | | | |
| weekly wages earned by any person and that no deductions have been made either directly or indirectly | | | |
| from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below: | | | |
| | | | |
| | | | |
| | | | |
| | REMARKS: | | |
| (2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed. | | | |
| (3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor. | | | |
| (4) That: (a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS | NAME AND TITLE | SIGNATURE | |
| in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below. | | OVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR CUTION. SEE SECTION 1001 OF TITLE 18 AND SECTION 3729 OF | |

EMPLOYEE RIGHTS

UNDER THE DAVIS-BACON ACT

FOR LABORERS AND MECHANICS EMPLOYED ON FEDERAL OR FEDERALLY ASSISTED CONSTRUCTION PROJECTS

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| WA | GE | ES | | |

You must be paid not less than the wage rate listed in the Davis-Bacon Wage Decision posted with this Notice for the work you perform.

OVERTIME

You must be paid not less than one and one-half times your basic rate of pay for all hours worked over 40 in a work week. There are few exceptions.

ENFORCEMENT

Contract payments can be withheld to ensure workers receive wages and overtime pay due, and liquidated damages may apply if overtime pay requirements are not met. Davis-Bacon contract clauses allow contract termination and debarment of contractors from future federal contracts for up to three years. A contractor who falsifies certified payroll records or induces wage kickbacks may be subject to civil or criminal prosecution, fines and/or imprisonment.

APPRENTICES

Apprentice rates apply only to apprentices properly registered under approved Federal or State apprenticeship programs.

PROPER PAY

If you do not receive proper pay, or require further information on the applicable wages, contact the Contracting Officer listed below:

or contact the U.S. Department of Labor's Wage and Hour Division.





Register your Business with the System of Award Management (SAM)

You need to register your business with the federal government's SAM, the primary database of vendors doing business with the federal government. This registration is sometimes referred to as "self-certifying" your small business. Federal Acquisitions Regulations (FAR) require all prospective vendors to be registered in SAM prior to the award of a contract, basic agreement, basic ordering agreement, or blanket purchase agreement.

Using SAM you will be able to register your business size and socio-economic status while completing the required solicitation clauses and certification. By completing your required solicitation clauses and certifications you certify that the information provided about your company and its business activities are correct.

SAM is also a marketing tool for businesses. SAM allows Government agencies and contractors to search for your company based on your ability, size, location, experience, ownership and more. SAM also informs searchers of firms certified by the SBA under the 8(a) Development and HUBZone Programs.

www.sam.gov

ALERT: SAM IS FREE TO REGISTER

There is NO FEE to register, or maintain your registration, in the System for Award Management (SAM.gov). If you receive an email from a company claiming to represent SAM.gov, be cautious. If you get an e-mail from a company offering to help you register in SAM.gov asking you to contact them and pay them money, be cautious. These messages are not from the Federal Government. It is FREE TO REGISTER in SAM.gov for any entity. It is also free to get help with your registration.

To create an account and access SAM as a new user:

Step 1: Go to www.sam.gov.

Step 2: Click on "Create a User Account."

Step 3: Choose Account Type:

Create an Individual User Account to perform tasks such as register/update your entity, create and manage exclusion records or to view FOUO level data for entity records.

Create a System User Account if you need system-to-system communication or if performing data transfer from SAM to your government database system. Complete the requested information, and then click "Submit."

Step 4: Click "DONE" on the confirmation page. You will receive an email confirming you have created a user account in SAM.

Step 5: Click the validation link in the email that contains the activation code within 48 hours to activate your user account. If the email link is not hyperlinked (i.e., underlined or appearing in a different color), please copy the validation link and paste it into the browser address bar. You can now register an entity. If you are a designated government official you can search For Official Use Only (FOUO) information and enter exclusions into the system.

Step 6: If you are an organization, business, government agency or grantee (known in SAM as an "entity"), you must also register your entity in SAM. NOTE: Creating a user account does not create a registration in SAM, nor will it update/renew an existing registration in SAM.

To register in SAM as an entity:

- **Step 1:** Login to SAM with your user ID and password.
- **Step 2:** Gather all of the required information needed to complete your registration.
- **Step 3:** Click on "Register New Entity" from the left side navigation pane. Then click "Start Registration" near the bottom of the registration overview page.
- **Step 4:** Complete and submit the online registration. It is estimated that it will take approximately 45 minutes to complete registration if you already have all the necessary information on hand, depending upon the size and complexity of your entity.
- **Step 5:** You will receive a "congratulations message" from SAM.gov after registration has been successfully submitted and an email confirming that your registration is in process. Note that new registrations can take an average of 7-10 business days to process in SAM. SAM must send out some information for validation with outside parties before your registration can be activated; this includes TIN validation with the IRS and CAGE validation/assignment with DoD. This timeframe may be longer if the information you provide is flagged for manual validation by either party. If you notice your registration has had a 'Submitted' status for longer than 10 business days, and you have not otherwise been contacted to correct or update information, please contact the Federal Service Desk at 866-606-8220 or https://www.fsd.gov.

To update your entity's SAM registration, follow the below steps:

- **Step 1.** Go to the SAM Homepage: www.sam.gov.
- **Step 2.** Login first by entering your username and password in the top right-hand corner and then click the "Log In" button.
- **Step 3.** Select "Register/Update Entity" on the left-side of your screen.
- **Step 4.** You will see options for "Complete Registrations", "Incomplete Registrations" and "Inactive Registrations." Click on "Complete Registrations" if your registration is noted as Active.
- **Step 5.** Click on "Incomplete or Inactive," if you have changes that you want to enter. Please select the entity record that you want to update from the Entity List box and click the "Update" button.

For SAM Customer Service, contact:

Federal Service Desk URL: www.fsd.gov

Hours: 8am - 8pm (Eastern Time)

866-606-8220

If you press the HELP tab, you will find:

- Quick User Guides
- Full User Guide
- Helpful Hints
- Demonstration Videos
- Exclusions Information
- External Resources

Web Form

to

If you are unable to find an answer to your question using search, you can select

Live Chat

submit a ticket or you can select

to chat with the FSD Service Desk.

Appendix D

Existing Playground Structure Installation Guides



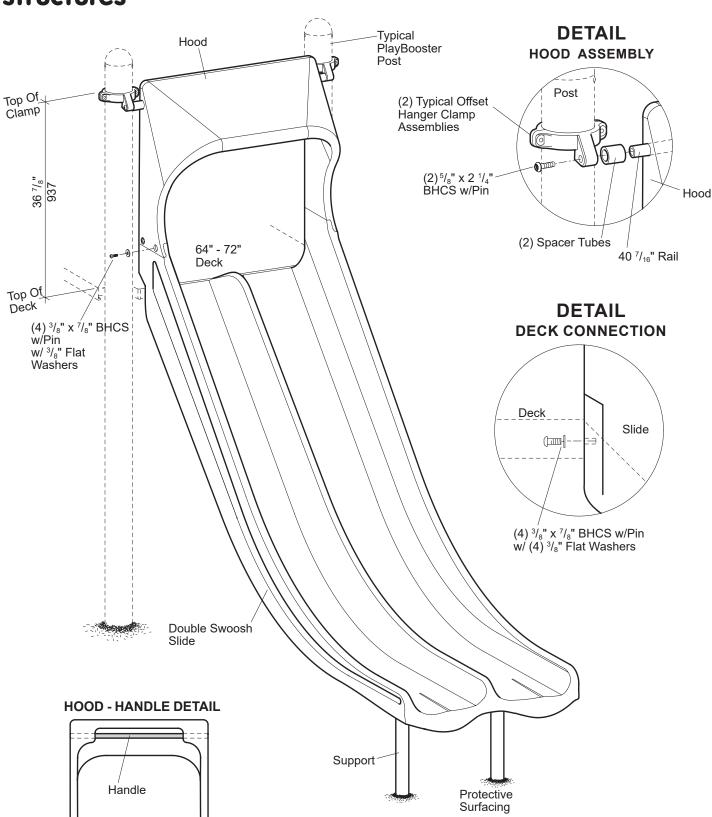




SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

13268000



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PlayBooster® 130390 Double Swoosh™ Slide, 64"-72" Sheet 1 of 2
601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 888-574-4678 LSI Install Help 888-438-6574 LSI Direct 763-972-5200 Int. FAX (763) 972-3185



PlayBooster® 130390 Double Swoosh™ Slide,

64"-72'

Parts List

| Part# | Description Qty. |
|--------------------------------|---------------------------------------------------------------------------------------------------|
| 128823 | Double Swoosh Slide, 64"/72", Specify Color1 |
| 128777 | Slide Hood, Specify Color1 |
| 100583 | 40 ⁷ / ₁₆ " Aluminum Rail, Specify Color |
| 132443 | Spacer Tube, Specify Color2 |
| 105327 | 5" Half Clamp, Specify Color2 |
| 113729 | Offset Hanger Clamp, Specify Color2 |
| 100610 | ¹ / ₄ " x ⁵ / ₈ " Drive Rivet AL/SST2 |
| 150941 | Support (DB), Specify Color2 |
| 151021 | Support 64" Deck (SM), Specify Color2 |
| 151022 | Support 72" Deck (SM), Specify Color2 |
| 264735 | Double Swoosh Slide Hardware Package1 |
| 100196 | ³ / ₈ " x ⁷ / ₈ " BHCS w/Pin, SST8 |
| 100203 | ⁵ / ₈ " x 2 ¹ / ₄ " BHCS w/Pin, SST2 |
| 100292 | ³ / ₈ " x 1 ¹ / ₄ " BHCS w/Pin Ltd. Thread Bolt, SST4 |
| 100351 | ³ / ₈ " Tee Nut, SST4 |
| 100362 | ³ / ₈ " Flat Washer, SST |
| 111442 | Rubber Bushing4 |
| 100198 | ³ / ₈ " x 1 ¹ / ₈ " BHCS w/Pin, SST4 |
| 121348 | 4 Hole (SM) Hardware Package |
| 100266 | ¹ / ₂ " x 2 ³ / ₄ " Expansion Anchor4 |
| 100322 | ¹ / ₂ " Standard Hex Nut, SST4 |
| 100363 | ¹ / ₂ " Flat Washer, SST4 |
| DB = Direct Bury | |
| SM = Surface Mo | unt |

Specifications

Slide: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

Spacer Tube: Fabricated from 1.3125 O.D. x 16 Ga. (.065) steel tubing. Finish: ProShield[®], color specified.

Hood: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.

Rail: Extruded from 1.125" O.D. x .312" W. 6005-T5 aluminum. Finish: ProShield, color specified.

Support: Weldment comprised of 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing and ¹/₄" x 3" mounting plate. Finish: ProShield, color specified.

Offset Hanger Clamp Assembly:

: Cast aluminum. Finish: ProShield, color specified.

Fasteners:

Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product

installation/specifications).

Installation Time:

SM - Approx. 2 man hours **DB** - Approx. 3 man hours

Concrete Req.: A

Approx. 2.6 cu. ft. 6' (1,83 m) minimum use zone at exit

Weight:

179 lbs. 64" (1,63 m) Deck Height

Fall Height: 64" (1,63 m) Deck Height 6' (1,83 m) Deck Height

Installation Instructions

Direct Bury

- 1) Dig footings spaced as shown.
- 2) Attach the supports to the slide using $^{3}/_{8}$ " x 1 $^{1}/_{4}$ " BHCS w/Pin limited thread bolts, $^{3}/_{8}$ " flat washers, rubber bushings and $^{3}/_{8}$ " flat washers. Refer to the Support Attachment Detail.
- Attach the slide to the face of the deck using ³/₈" x ⁷/₈" BHCS w/Pin with ³/₈" flat washers. Refer to the Deck Connection Detail.
- 4) Attach the slide hood to the slide using $\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/Pin with $\frac{3}{8}$ " flat washers.
- 5) Insert 40 ⁷/₁₆" rail through top of hood, place spacer tubes over each end of the 40 ⁷/₁₆" rail and attach to posts at height shown using offset hanger clamp assemblies. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 6) Prop the end of the slide according to the proper deck height. With support plumb pour concrete footings. Allow concrete footing to cure for a minimum of 72 hours before users are allowed to play on the structure.
- Install protective surfacing before users are allowed to play on the structure.

Surface Mount

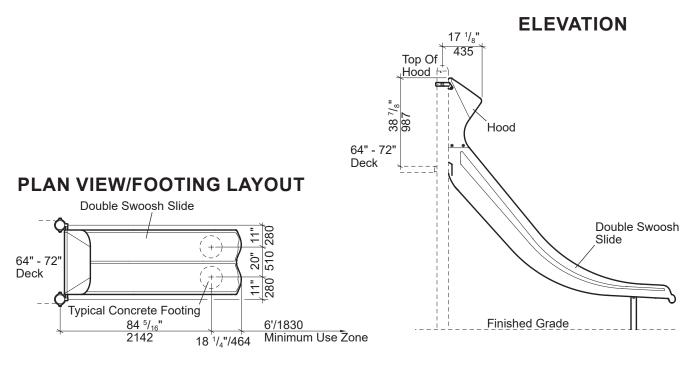
- Attach the supports to the slide using ³/₈" x 1 ¹/₄" BHCS w/Pin limited thread bolts, ³/₈" flat washers, rubber bushings and ³/₈" flat washers. Refer to the Support Detail.
- Attach the slide to the face of the deck using ³/₈" x ⁷/₈" BHCS w/Pin with ³/₈" flat washers. Refer to the Deck Connection Detail.
- 3) Mark anchor bolt locations on concrete slab through holes in anchor plates and disconnect slide from the face of the deck. Drill ½" x 3" deep holes on marks into concrete using a hammer drill and ½" masonry bit. Tap expansion anchors into drilled holes. Reposition slide and reattach to the face of the deck following step 2. Fasten support to expansion anchors using ½" standard hex nuts with ½" flat washers.
- 4) Attach the slide hood to the slide using $\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/Pin with $\frac{3}{8}$ " flat washers.
- 5) Insert $40^{7}/_{16}$ " rail through top of hood, place spacer tubes over each end of the $40^{7}/_{16}$ " rail and attach to posts at height shown using offset hanger clamp assemblies. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- Install protective surfacing before users are allowed to play on the structure.

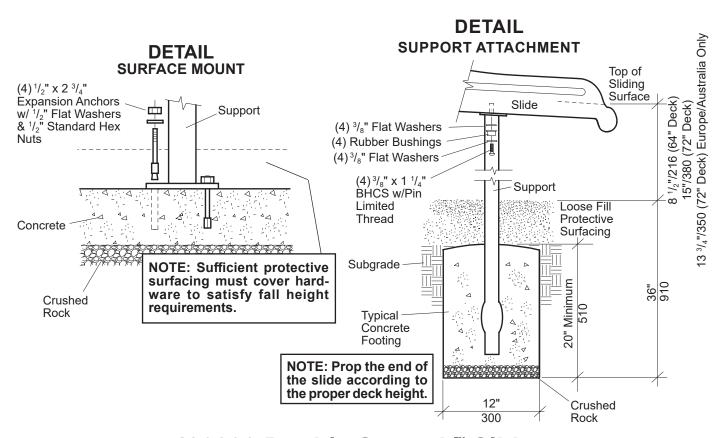


Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

130401a0







Slide, 64"-72" 130390 Double Swoosh PlayBooster® 601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 888-574-4678 LSI Install Help 888-438-6574 LSI Direct 763-972-5200 Int. FAX (763) 972-3185

Sheet 2 of 2



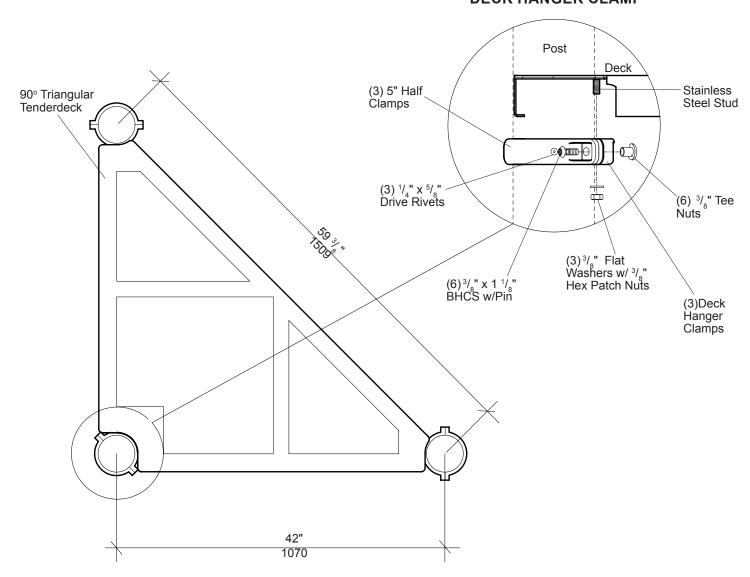




Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

14582500

DETAILDECK HANGER CLAMP



PlayBooster®

122197 90° Triangular Tenderdeck

Iandscape

PlayBooster® 122197 90° Triangular Tenderdeck

Parts List

| Part# | Description | Otv. |
|--------|-----------------------------------------------------------------------------------|------|
| 145658 | 90° Tri-Deck, Specify Color | 1 |
| 105327 | 5" Half Clamp, Specify Color | |
| 106022 | Deck Hanger Clamp, Specify Color | |
| 120203 | Triangular Deck Hardware Package | 1 |
| 100198 | ³ / ₈ " x 1 ¹ / ₈ " BHCS w/Pin, SST | 6 |
| 100321 | ³ / ₈ " Hex Patch Nut, SST | |
| 100351 | ³ / ₈ " Tee Nut, SST | 6 |
| 100362 | ³ / ₈ " Flat Washer, SST | |
| 100610 | ¹ / ₄ " x ⁵ / ₈ " Drive Rivet, AL/SST | 3 |

Specifications

Triangular Deck: Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is

perforated with ${}^5/{}_{16}$ " diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size measures 2 ${}^5/{}_8$ " x 37 ${}^3/{}_4$ ". Finish:

 $TenderTuff^{TM},\ color\ specified.$

Deck Hanger Clamp Assembly:

Cast aluminum. Finish: ProShield®, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tam-

perproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product

installation/specifications).

Installation Time: Approx. ¹/₂, man hour

Weight: 67 lbs.

- 1) Mark posts for the appropriate height of the deck you are installing.
- Fasten deck hanger clamps to marked position on posts. See Detail on front of sheet.
- 3) Lift deck assembly into position, lining up stud underneath deck with deck hanger clamp as shown. Attach using ³/₈" hex patch nuts with ³/₈" flat washers. With deck level and posts plumb, final tighten all hardware.
- Install ¹/₄" x ⁵/₈" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 5) After attachment of enclosures and components is complete, pour concrete footings. Allow concrete footings to cure a minimum of 72 hours before users are allowed to play on the structure.
- Install protective surfacing before users are allowed to play on the structure.

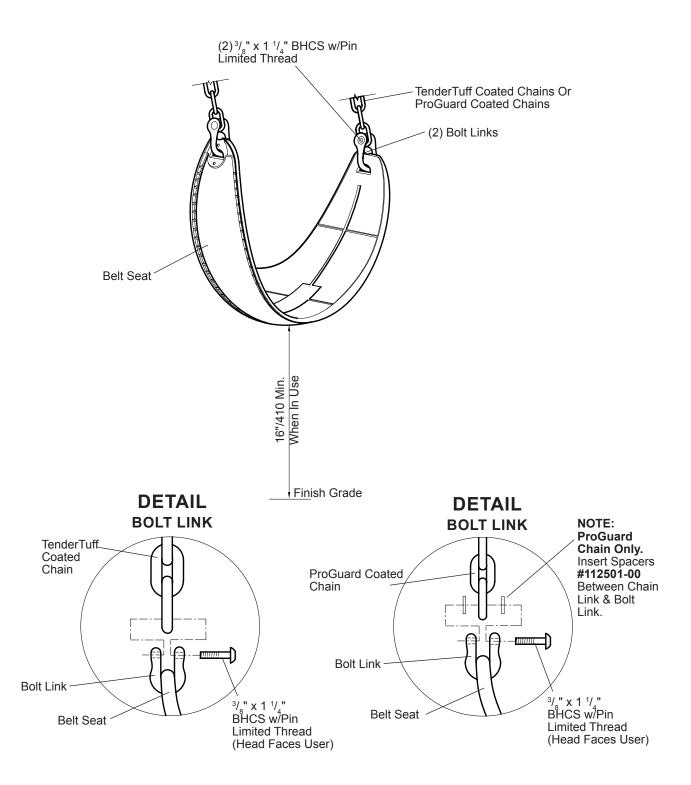






Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

17745700



Swings

174018 Belt Seat

Sheet 1 of 2

Swings 174018 Belt Seat



Parts List

| Part # | Description | Qty. |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| 128842 178679 175251 | 7 Ft. High Beam Belt Swing Seat, Black 57 ⁷ / ₁₆ " Chain, TenderTuff, Specify Color 57 ⁷ / ₁₆ " Chain, ProGuard | 2 |
| 132672 100292 138915 112501 | Bolt Link w/Bolt & Spacers 3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST Bolt Link, SST Chain Spacer | 2 |
| 132635 100292-00 138915 | Bolt Link w/Bolt Hardware Package ³ / ₈ " x 1 ¹ / ₄ " BHCS w/Pin Ltd. Thread, SST Bolt Link, SST | 2 |
| 128842 152050 174404 | 8 Ft. High Beam Belt Swing Seat, Black | 2 |
| 132672 100292 138915 112501 | Bolt Link w/Bolt & Spacers | 2 |
| 132635 100292 138915 | Bolt Link w/Bolt Hardware Package | 2 |
| 128842 152052 174884 | 10 Ft. High Beam Belt Swing Seat, Black | 1 2 2 |
| 132672 100292 138915 112501 | Bolt Link w/Bolt & Spacers 3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST Bolt Link, SST Chain Spacer | 2 |
| 132635 100292 138915 | Bolt Link w/Bolt Hardware Package 3/8" x 1 1/4" BHCS w/Pin Ltd. Thread, SST Bolt Link, SST | 2 |

Specifications

Belt Seats:

Made from white nylon measuring .080" x .785" Chain Spacer:

Chain/ProGuard: Steel ³/₁₆" straight link chain, 800 lb. working load

limit. Finish: ProGuard.

Chain/Coated: Steel ³/₁₆" straight link chain, 800 lb. working load

limit. Finish: TenderTuff®, color specified.

Molded from U.V. stabilized black EPDM rubber encapsulating a weldment comprised of a 22 GA

(.029") spring stainless steel sheet, and (4) .105" thick stainless steel washers. The belt seat elliptical shape measures 7" wide x 26" long x .700" thick.

Bolt Link: Stainless Steel.

Fasteners: Primary fasteners shall be socketed and pinned tam-

perproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product

installation/specifications).

Installation Time: 1/4 man hour per seat

8 lbs. (7 Ft. Beam w/ProGuard Chains)

9 lbs. (7 Ft. Beam w/TenderTuff Chains 8 lbs. (8 Ft. Beam w/ProGuard Chains) 9 lbs. (8 Ft. Beam w/TenderTuff Chains) 10 lbs. (10 Ft. Beam w/ProGuard Chains)

11 lbs. (10 Ft. Beam w/TenderTuff Chains)

Installation

Swing Hangers With Double Clevis

- Attach chains to double clevis using ³/₈" x 1 ¹/₄" BHCS w/pin limited thread, as shown.
- Attach chains to belt seat using bolt links with $^{3}/_{8}$ " x 1 $^{1}/_{4}$ " BHCS w/ pin limited thread. Be sure bolt heads face user. NOTE: Use chain spacers as shown when installing ProGuard chains.
- Install protective surfacing before users are allowed to play on the structure.

Anti-wrap Swing Hangers

- Attach chains to aluminum clevis using ³/₈" x ⁷/₈" BHCS w/pin limited thread, as shown.
- Attach chains to belt seat using bolt links with 3/8" x 1 1/4" BHCS w/ pin limited thread. Be sure bolt heads face user. NOTE: Use chain spacers as shown when installing ProGuard chains.
- Install protective surfacing before users are allowed to play on the structure.



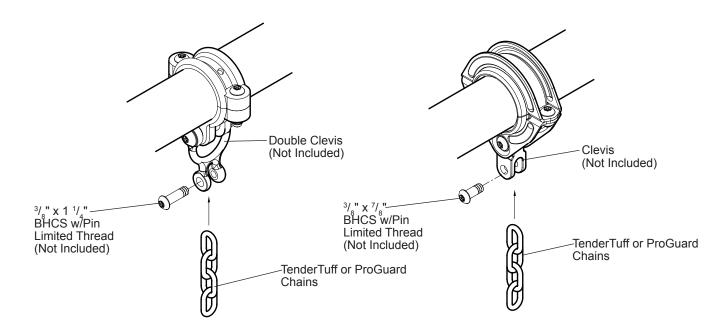


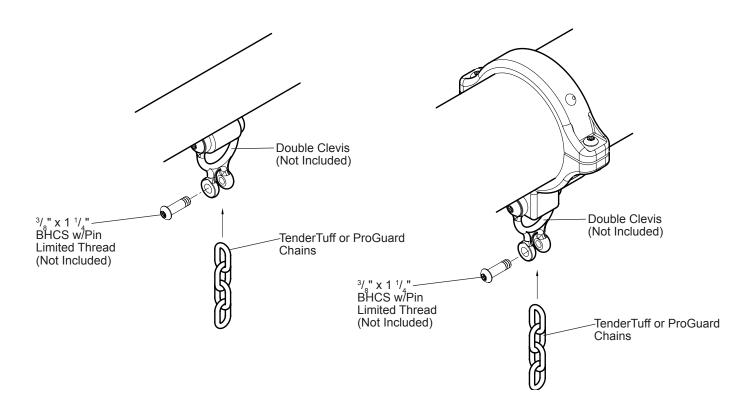


Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

177460b

SWING HANGER OPTIONS





Swings

174018 Belt Seat

Sheet 2 of 2



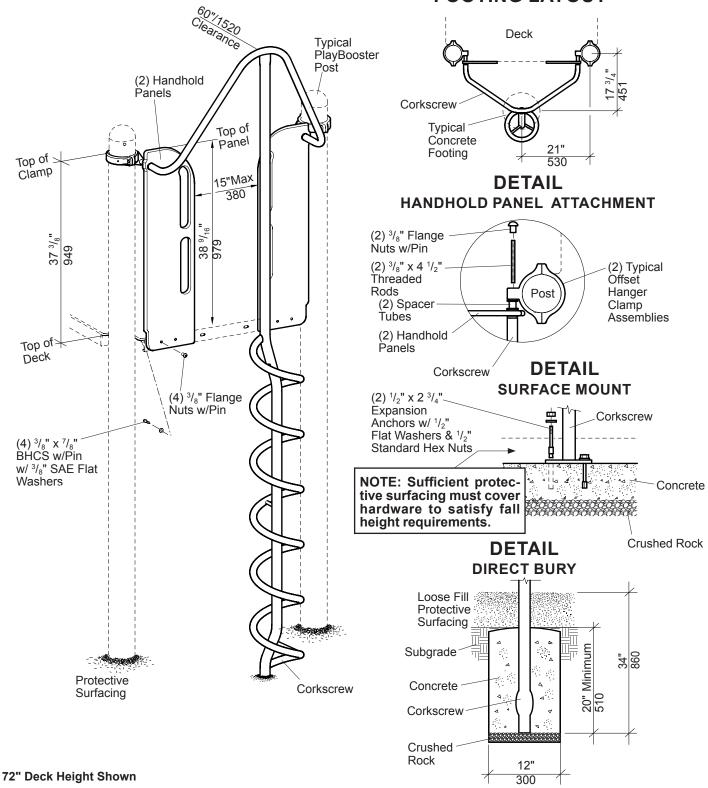




Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

14814600

PLAN VIEW/ FOOTING LAYOUT



PlayBooster®

148432 Corkscrews, 32"-72" Decks

PlayBooster® 148432 Corkscrews, 32"-72" Decks



Parts List

| Part# | Description Qty. |
|------------------|----------------------------------------------------------------------------------------------------|
| 147954 | Handhold Panel, Specify Color |
| 105327 | 5" Half Clamp, Specify Color |
| 113729 | Offset Hanger Clamp, Specify Color2 |
| 147941 | Corkscrew, 32" Deck (DB), Specify Color |
| 147942 | Corkscrew, 40" Deck (DB), Specify Color |
| 147943 | Corkscrew, 48" Deck (DB), Specify Color |
| 146511 | Corkscrew, 56" Deck (DB), Specify Color1 |
| 146512 | Corkscrew, 64" Deck (DB), Specify Color |
| 146513 | Corkscrew, 72" Deck (DB), Specify Color1 |
| 146514 | Corkscrew, 32" Deck (SM), Specify Color1 |
| 146515 | Corkscrew, 40" Deck (SM), Specify Color |
| 146516 | Corkscrew, 48" Deck (SM), Specify Color1 |
| 146517 | Corkscrew, 56" Deck (SM), Specify Color1 |
| 146518 | Corkscrew, 64" Deck (SM), Specify Color |
| 146519 | Corkscrew, 72" Deck (SM), Specify Color1 |
| 113468 | ⁷ / ₈ " O.D. x 1 ¹¹ / ₁₆ " Spacer Tube, Specify Color2 |
| 100610 | ¹ / ₄ " x ⁵ / ₈ " Drive Rivet, AL/SST |
| 148176 | Pole Hardware Package1 |
| 100196 | ³ / ₈ " x ⁷ / ₈ " BHCS w/Pin, SST4 |
| 100198 | ³ / ₈ " x 1 ¹ / ₈ " BHCS w/Pin, SST4 |
| 100351 | ³ / ₈ " Tee Nut, SST |
| 100353 | ³ / ₈ " Flange Nut w/Pin, SST6 |
| 100365 | ³ / ₈ " SAE Flat Washer, SST4 |
| 148081 | ³ / ₈ " x 4 ¹ / ₂ " Threaded Rod, SST |
| 111392 | 2-Hole (SM) Hardware Package |
| 100266 | ¹ / ₂ " x 2 ³ / ₄ " Expansion Anchors |
| 100322 | ¹ / ₂ " Standard Hex Nut, SST |
| 100363 | 1/2" Flat Washer, SST |
| DP - Direct Purs | |

SM = Surface Mount

Specifications

Weldment comprised of 1.900" O.D. RS-40 (.120

.130") galvanized steel tubing, and 1.315" O.D. RS-20 (.080" - .090") galvanized steel tubing. Finish:

ProShield®, color specified.

Handhold Panel: Solid color Permalene®, color specified.

Spacer Tube: Made from 6061-T6 aluminum $\frac{7}{8}$ " O.D. x 1 $\frac{11}{16}$ ".

Finish: ProShield, color specified.

Clamps: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tam-

> perproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product

installation/specifications).

Installation Time: SM - Approx. $1^{-1}/_{2}$ man hours

DB - Approx. 2 man hours

Approx. 1.3 cu. ft. Concrete Req.: Weight:

67 lbs. (32"-48" Deck)

Fall Height:

79 lbs. (56"-72" Deck) 48" (1220 mm) - (32", 40" & 48" Deck Heights) 72" (1830 mm) - (56", 64" & 72" Deck Heights)

- (Direct Bury) Dig footing hole as shown. Refer to the Plan View/ Footing Layout.
- Attach offset hanger clamps to posts at heights shown using 5" half clamps, $\frac{3}{8}$ " x 1 $\frac{1}{8}$ " BHCS w/pin and $\frac{3}{8}$ " tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- Attach handhold panels to the face of the deck using ³/₈" x ⁷/₈" BHCS w/pin with $\frac{3}{8}$ " SAE flat washers and $\frac{3}{8}$ " flange nuts w/pin.
- Attach corkscrew to handhold panels and offset hanger clamps using ³/₈" flange nuts w/pin, 3/8" x 4 1/2" threaded rods and spacer tubes. Refer to the Handhold Panel Attachment Detail. **NOTE:** Turn ³/₈" $x \ 4^{-1}/2$ " threaded rod into $\frac{3}{8}$ " flange nut w/pin until it bottoms out, before attaching corkscrew.
- (Direct Bury) With corkscrew plumb, pour concrete footing. Allow concrete footing to cure a minimum of 72 hours before users are allowed to play on the structure.
 - (Surface Mount) Drill \(^1/_2\)" x 3\" deep holes through support plate using hammer drill and 1/2" masonry bit. Tap expansion anchors into drilled holes. Fasten support plates to expansion anchors using 1/2" standard hex nuts with 1/2" flat washers.
- Install protective surfacing before users are allowed to play on the structure.



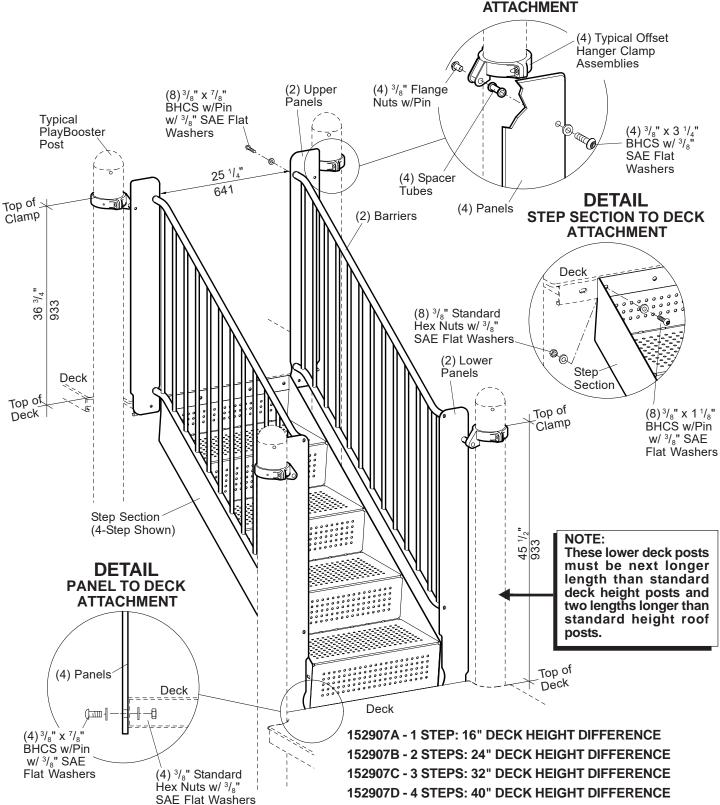




Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM

15312400

DETAIL PANEL TO CLAMP ATTACHMENT



PlayBooster®

152907 Deck Link, w/ Barriers

Sheet 1 of 2

PlayBooster® 152907 Deck Link, w/ Barriers



Parts List

| Part# | Description | Qty. |
|--------|-----------------------------------------------------------------------------------|------|
| 144696 | 1-Step Section, Specify Color | 1 |
| 144698 | 2-Step Section, Specify Color | |
| 144700 | 3-Step Section, Specify Color | 1 |
| 144702 | 4-Step Section, Specify Color | |
| 144703 | 1-Step Barrier, Specify Color | 2 |
| 144705 | 2-Step Barrier, Specify Color | 2 |
| 144707 | 3-Step Barrier, Specify Color | 2 |
| 144709 | 4-Step Barrier, Specify Color | |
| 153896 | Lower Panel, Specify Color | 2 |
| 153895 | Upper Panel, Specify Color | |
| 113468 | Spacer Tube, Specify Color | 4 |
| 100610 | ¹ / ₄ " x ⁵ / ₈ " Drive Rivet, AL/SST | |
| 105327 | 5" Half Clamp, Specify Color | |
| 113729 | Offset Hanger Clamp, Specify Color | 4 |
| 156283 | Deck Link Barr/Hrail Hardware Package | 1 |
| 100168 | ³ / ₈ " x 3 ¹ / ₄ " BHCS, SST | 4 |
| 100196 | ³ / ₈ " x ⁷ / ₈ " BHCS w/Pin, SST | 12 |
| 100198 | ³ / ₈ " x 1 ¹ / ₈ " BHCS w/Pin, SST | 16 |
| 100327 | 3/8" Standard Hex Nut, SST | 12 |
| 100351 | 3/8" Tee Nut, SST | |
| 100353 | 3/8" Flange Nut w/Pin, SST | 4 |
| 100365 | ³ / ₈ " SAE Flat Washer, SST | 36 |

Specifications

Zinc plated 7 GA. (.179") HR flat steel. Finish:

ProShield®, color specified.

Step Section: Formed from 12 GA (.105) sheet steel conforming to

ASTM A1011. Standing surface is 24 ³/₈" wide x 14" deep and is perforated with 5/16" diameter holes. Fin-

ish: TenderTuff, color specified.

Weldment comprised of 1.125" O.D. x 11 Ga. (.120"

wall) steel tubing, $\frac{5}{8}$ " O.D. steel bar with 203 or 303 stainless steel inserts with $\frac{3}{8}$ " internal threads. Finish:

TenderTuff, color specified.

Spacer Tube: Made from 6061-T6 aluminum $\frac{7}{8}$ " O.D. x 1 $\frac{11}{16}$ ".

Finish: ProShield, color specified.

Clamps: Cast aluminum. Finish: ProShield, color specified.

Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM

F 879 unless otherwise indicated (see specific prod-

uct installation/specifications).

Approx. 1 1/2 man hours **Installation Time:**

Weight: 1-Step - 130 lbs.

2-Step - 182 lbs.

3-Step - 236 lbs. 4-Step - 296 lbs.

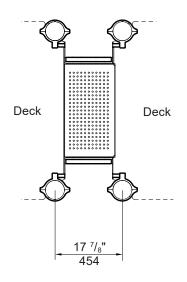
Fall Height: Deck Height

- 1) Attach step section to decks using $\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/pin with $\frac{3}{8}$ " SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers, as shown. Refer to the Step Section To Deck Attachment Detail.
- Attach upper and lower panels to the face of the deck using $\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/pin with ³/₈" SAE flat washers and ³/₈" standard hex nuts with ³/₈" SAE flat washers. Refer to the Panel to Deck Attachment Detail.
- Attach offset hanger clamps to posts at heights shown using 5" half clamps, $^3/_8$ " x 1 $^1/_8$ " BHCS w/pin with $^3/_8$ " tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- Attach upper and lower panels to offset hanger clamps using $\frac{3}{8}$ " x 3 $\frac{1}{4}$ " BHCS with ³/₈" SAE flat washers, spacer tubes and ³/₈" flange nuts w/pin. Refer to the Panel To Clamp Attachment Detail.
- Attach barriers to upper and lower panels using ³/₈" x ⁷/₈" BHCS w/pin and ³/₈" SAE flat washers, as shown.
- Install ¹/₄" x ⁵/₈" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- Install protective surfacing before users are allowed to play on the structure.

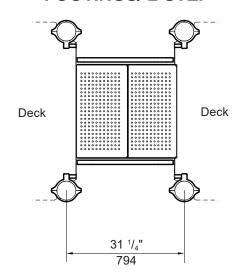


PLAN VIEW/FOOTING LAYOUTS

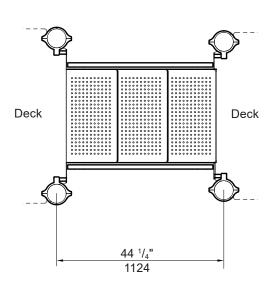
FOOTINGS/ 1-STEP



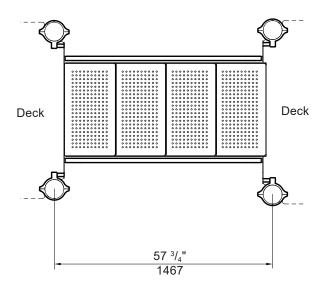
FOOTINGS/ 2-STEP



FOOTINGS/ 3-STEP



FOOTINGS/ 4-STEP



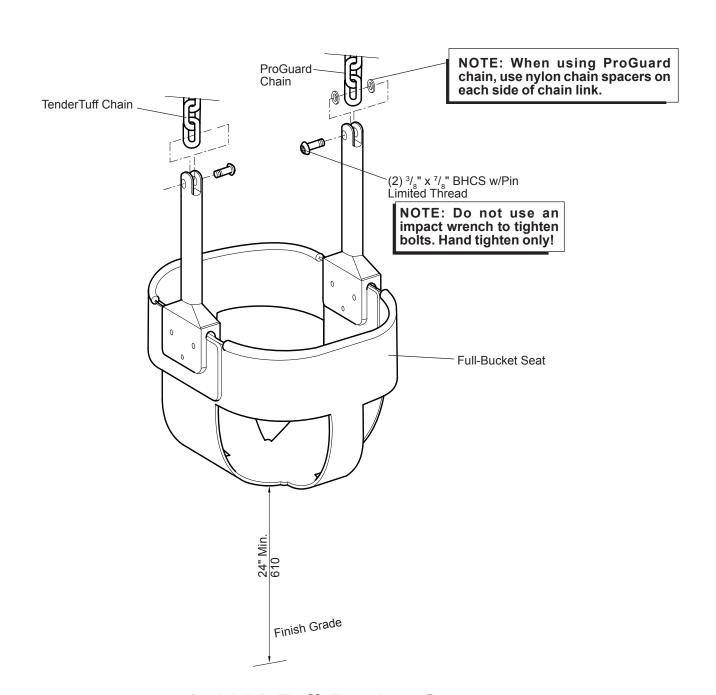






Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

18985400



Swings

176038 Full-Bucket Seat, w/Chains

Sheet 1 of 2

Swings 176038 Full-Bucket Seat, w/Chains



Parts List

| Part# | Description | Qty. |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------|------|
| | 7 Ft. High Beam (5" Dia. Beam) | |
| 186276 | Full-Bucket Swing Seat, Black | 1 |
| 141739 | 43 ³ / ₁₆ " Chain, TenderTuff, Specify Color | 2 |
| 175248 | 43 ³ / ₁₆ " Chain, TenderTuff, Specify Color | 2 |
| 138414 | Bucket Seat Hardware Package | 1 |
| 100290 | 3/8" x 7/8" BHCS w/Pin Limited Thread, SST | 2 |
| 112501 | Chain Spacer (For ProGuard Chains Only) | 4 |
| | 8 Ft. High Beam | |
| 186276 | Full-Bucket Swing Seat, Black | 1 |
| 160110 | 52 ⁹ / ₁₆ " Chain, TenderTuff, Specify Color | 2 |
| 174882 | 52 ⁹ / ₁₆ " Chain, TenderTuff, Specify Color | 2 |
| 138414 | Bucket Seat Hardware Package | 1 |
| 100290 | ³ / ₈ " x ⁷ / ₈ " BHCS w/Pin Limited Thread, SST Chain Spacer (For ProGuard Chains Only) | 2 |
| 112501 | Chain Spacer (For ProGuard Chains Only) | 4 |
| | 10 Ft. High Beam | |
| 186276 | Full-Bucket Swing Seat, Black | 1 |
| 152051 | 76 ⁷ / ₁₆ " Chain, TenderTuff, Specify Color | 2 |
| 174883 | 76 ⁷ / ₁₆ " Chain, ProGuard | 2 |
| 138414 | Bucket Seat Hardware Package | 1 |
| 100290 | ³ / _o " x ⁷ / _o " BHCS w/Pin Limited Thread, SST | 2 |
| 112501 | Chain Spacer (For ProGuard Chains Only) | 4 |
| | 7 Ft. High Beam (Tot) | |
| 186276 | Full-Bucket Swing Seat, Black | 1 |
| 152053 | 37 ¹ / ₂ " Chain, TenderTuff, Specify Color | |
| 175247 | 37 ¹ / ₂ " Chain, ProGuard | 2 |
| 138414 | Bucket Seat Hardware Package | 1 |
| 100290 | ³ / ₈ " x ⁷ / ₈ " BHCS w/Pin Limited Thread, SST | 2 |
| 112501 | Chain Spacer (For ProGuard Chains Only) | 4 |
| | 75" High Beam (Toddler) | |
| 186276 | Full-Bucket Swing Seat, Black | 1 |
| 152016 | 29 ⁷ / ₈ " Chain, TenderTuff, Specify Color | 2 |
| 174881 | 29 ⁷ / ₈ " Chain, ProGuard | 2 |
| 138414 | Bucket Seat Hardware Package | 1 |
| 100290 | ³ / ₈ " x ⁷ / ₈ " BHCS w/Pin Limited Thread, SST | |
| 112501 | Chain Spacer (For ProGuard Chains Only) | 4 |
| | | |

Specifications

Full-Bucket Seat:

Seat shall be molded of U.V. stabilized, high quality, black rubber, encapsulating a 24 gauge stainless steel reinforcement plate. Handle cast from 356-T6 aluminum alloy with black polyarmor paint finish. Handle attaches to seat with (3) $^{1}\!/_{_{4}}$ " x 1 $^{5}\!/_{_{16}}$ " long stainless steel rivets. The finished size of the full bucket shall be 9" deep x 10 $^{1}\!/_{_{2}}$ " wide.

Chain/Coated:

Steel ³/₁₆" straight link chain, 800 lb. working load limit. Finish: TenderTuff, color specified.

Chain/ProGuard: Steel ³/₁₆" straight link chain, 800 lb. working load

limit. Finish: ProGuard.

Fasteners: Primary fasteners shall be socketed and pinned tam-

perproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product

installation/specifications).

Installation Time: ¹/₄ man hour per seat

Weight: 14 lbs. (7 FT. Beam 5" Dia. w/TenderTuff Chain)

13 lbs. (7 FT. Beam 5" Dia. w/ProGuard Chain)
14 lbs. (8 FT. Beam w/TenderTuff Chain)
14 lbs. (8 FT. Beam w/ProGuard Chain)
17 lbs. (10 FT. Beam w/TenderTuff Chain)
16 lbs. (10 FT. Beam w/ProGuard Chain)
12 lbs. (7 FT. Beam w/TenderTuff Chain)
12 lbs. (7 FT. Beam w/ProGuard Chain)

11 lbs. (75" Beam w/TenderTuff Chain) 11 lbs. (75" Beam w/ProGuard Chain)

Installation Instructions

Swing Hangers with Double Clevis

- Attach chains to double clevis using ³/₈" x 1 ¹/₄" BHCS w/pin limited thread bolts, as shown.
- 2) Attach chains to full-bucket seat using $\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/pin limited thread bolts. Be sure bolt heads face user. **NOTE:** *Use chain spacers as shown when installing ProGuard chains.*
- Install protective surfacing before users are allowed to play on the structure.

Anti-wrap Swing Hangers

- Attach chains to aluminum clevis using ³/₈" x ⁷/₈" BHCS w/pin limited thread bolts, as shown.
- 2) Attach chains to full-bucket seat using $\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/pin limited thread bolts. Be sure bolt heads face user. **NOTE:** *Use chain spacers as shown when installing ProGuard chains.*
- Install protective surfacing before users are allowed to play on the structure.

2/10/2016 Added Hand Tighten Only Note.



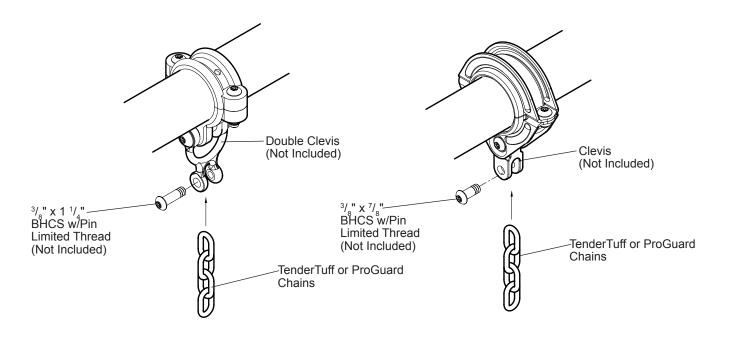


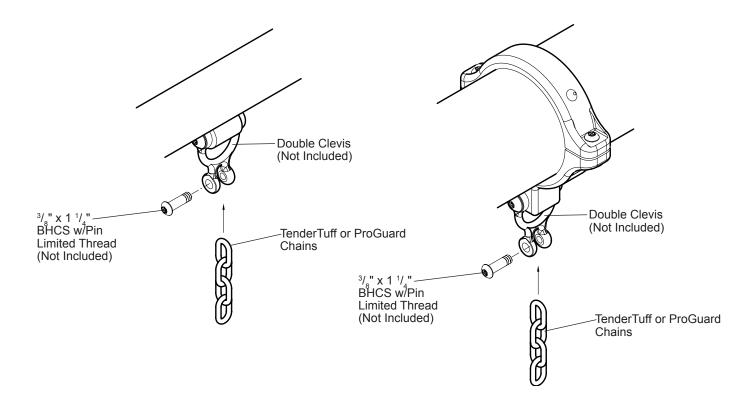


Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

177460b

SWING HANGER OPTIONS





Swings

176038 Full-Bucket Seat, w/Chains

Sheet 2 of 2

601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 888-574-4678 LSI Install Help 888-438-6574 LSI Direct 763-972-5200 Int. FAX (763) 972-3185

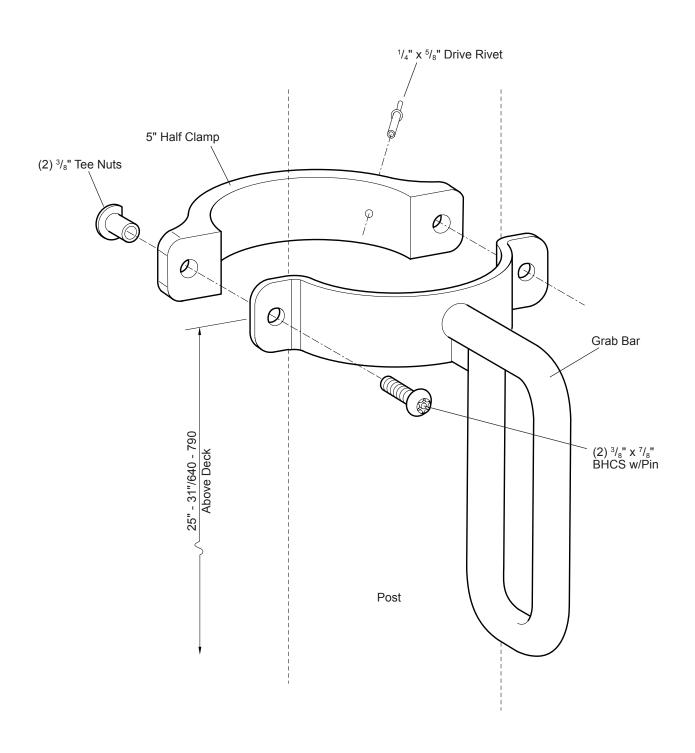






Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

12125200





PlayBooster® 120901 Grab Bar

Parts List

| Part# | Description | Qty. |
|--------|-----------------------------------------------------------------------------------|------|
| 105327 | 5" Half Clamp, Specify Color | 1 |
| 141541 | Grab Bar, Specify Color | |
| 106518 | Grab Bar Hardware Package | 1 |
| 100196 | ³ / ₈ " x ⁷ / ₈ " BHCS w/Pin, SST | 2 |
| 100351 | ³ / ₈ " Tee Nut, SST | 2 |
| 100610 | ¹ / ₄ " x ⁵ / ₈ " Drive Rivet, AL/SST | |

Specifications

Weldment comprised of formed $^{7}/_{8}$ " O.D. 11 GA (.120") and $^{1}/_{4}$ " x 1 $^{3}/_{4}$ " stainless steel half clamp. Finish: TenderTuffTM, color specified. Grab Bar:

Half Clamp: Cast aluminum. Finish: ProShield®, color specified.

Primary fasteners shall be socketed and pinned tam-**Fasteners:**

perproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product

installation/specifications).

Installation Time: Approx. 1/4 man hour

Weight: 5 Îbs.

- Attach grab bar to post at height shown, using a 5" half clamp, 3/8" x $^{7}/_{8}$ " BHCS w/pin and $^{3}/_{8}$ " tee nuts.
- Install ¹/₄" x ⁵/₈" drive rivet in 5" half clamp. Refer to the Offset Hanger Clamp Spec Sheet.
- Install protective surfacing before users are allowed to play on the structure.





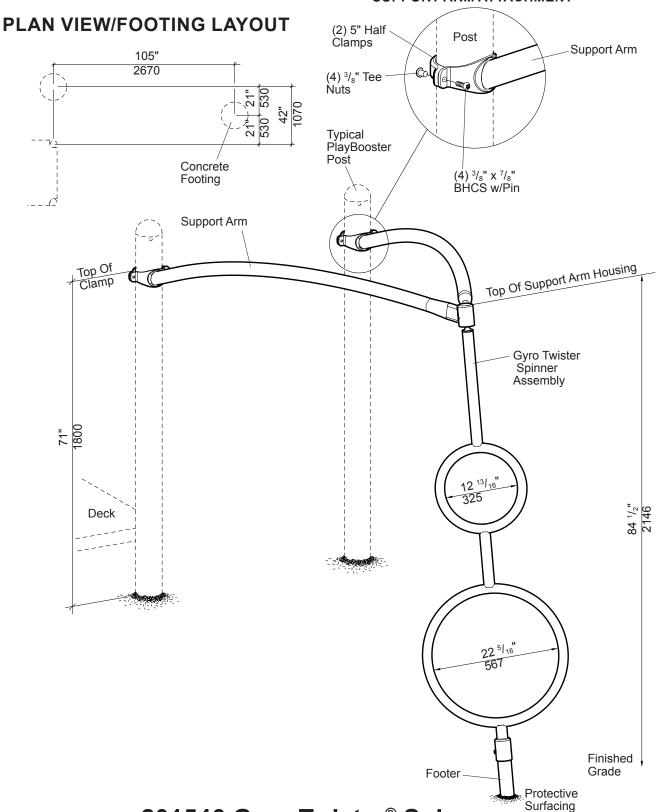


Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

DETAIL

20157800

SUPPORT ARM ATTACHMENT



PlayBooster®

201546 Gyro Twister® Spinner

Sheet 1 of 2

PlayBooster® 201546 Gyro Twister® Spinner

Parts List

| Part# | Description | Otv. |
|------------------|-----------------------------------------------------------------------------------|------|
| 100610 | ¹ / ₄ " x ⁵ / ₈ " Drive Rivet, AL/SST | 2 |
| 105327 | 5" Half Clamp, Specify Color | |
| 171114 | Gyro Twister Spinner Assembly, Specify Color | 1 |
| 157092 | Footer, (DB), Specify Color | * |
| 160514 | Gyro Twister Post, (SM), Specify Color | * |
| 186027 | Spinner UHMW Bushing | |
| 195055 | Support Arm, Specify Color | |
| 160502 | Gyro Twister Hardware Package | 1 |
| 100196 | ³ / ₈ " x ⁷ / ₈ " BHCS w/Pin, SST | 4 |
| 100351 | ³ / ₈ " T-Nuts, SST | 4 |
| 131849 | ⁵ / ₁₆ " x ¹ / ₂ " BHCS w/Pin, SST | |
| 121348 | 4-Hole (SM) Hardware Package | 1 |
| 100266 | ¹ / ₂ " x 2 ³ / ₄ " Expansion Anchor | 4 |
| 100322 | 1/2" Standard Hex Nut, SST | 4 |
| 100363 | ¹ / ₂ " Flat Washer, SST | |
| DB = Direct Bury | - | |

SM = Surface Mount

Specifications

Support Arm:

Weldment comprised of 2.375" (60,33 mm) O.D. RS40 (.130"-.140")(3,30 mm - 3,56 mm) wall galvanized steel tube, 2.750" (69,85 mm) O.D. 1018 steel, and 1/4" (6,35 mm) HRPO flat steel. Finish: ProShield®, color specified.

Gyro Twister Spinner Assy.:

Weldment comprised of 1.900" (48,26 mm) O.D. RS40 (.130"-.140") (3,30 mm - 3,55 mm) wall galvanized steel tube, 1.660" (42,16 mm) O.D. RS40 (.111"-.121") (2,82 mm-3,07 mm) galvanized steel tube, ³/₁₆" (4,75 mm) HRPO steel plate and 1 ⁷/₈" (47,63 mm) steel ball. Finish: ProShield, color specified.

Oil-filled UHMW PE. **Bushing:**

Footer: Weldment comprised of 2.375" (60,33 mm) O.D.

RS40 (.130"-.140") (3,30 mm - 3,55 mm) wall galvanized steel tube, 12 Ga. (.105") (2,67 mm) HR flat steel and 1 ⁷/₈" (47,63 mm) steel ball. Finish:

ProShield, color specified.

Primary fasteners shall be socketed and pinned tam-

perproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product

installation/specifications).

(DB) Approx. 1 $^{3}/_{4}$ man hours **(SM)** Approx. 1 $^{1}/_{2}$ man hours **Installation Time:**

(**DB**) Approx. 2.94 cu. ft.

Concrete Reg.: Min. Use Zone: 6' (1830 mm) minimum use zone

Weight: (**DB**) 106 lbs. (SM) 103 lbs.

Fall Height: 50" (1270 mm)

Installation Instructions

- (Direct Bury) Dig footing as shown. Refer to the Plan View Footing Layout and Footer Attachment Detail.
- Attach support arm to posts at height shown, using 5" half clamps, ³/₈" x ⁷/₈" BHCS w/pin and ³/₈" tee nuts. Refer to the Support Arm Attachment Detail.
- Place a bushing on each side of the footer's/twist post's 1 ⁷/₈" ball, as shown. Insert footer/twist post with bushings into Gyro Twister assembly. Align holes in bushings with holes in housing. When holes are aligned, insert 5/16" x 1/2" BHCS w/pin. Refer to the Gyro Twister Assembly Detail. NOTE: Use the slot in the bottom of the bushing to align holes.
- Place a bushing on each side of the Gyro Twister assemblies 1 ⁷/₈" ball, as shown. Insert Gyro Twister assembly with bushings into upper spinner mount. Align holes in bushings with holes in housing. When holes are aligned, insert ⁵/₁₆" x ¹/₂" BHCS w/pin. Refer to the Gyro Twister Assembly Detail. **NOTE:** Use the slot in the bottom of the bushing to align holes.
- (**Direct Bury**) Place a level on the footer gusset, when gusset is plumb, pour concrete footing. Allow concrete footing to cure a minimum of 72 hours before users are allowed to play on structure. NOTE: Gyro Twister assembly will have to be propped in position, until concrete has cured.

(Surface Mount) Drill ¹/₂" x 3" deep holes through twist post plate using hammer drill and 1/2" masonry bit. Tap expansion anchors into drilled holes. Fasten twist post to expansion anchors using 1/2" standard hex nuts with 1/2" flat washers.

- Install $\frac{1}{4}$ " x $\frac{5}{8}$ " drive rivets in 5" half clamps. Drill through hole in half clamp and into 5" post with a $\frac{1}{4}$ " or "F" (only) drill bit, insert rivet in hole and hammer rivet pin in until it is flush with head.
- Install protective surfacing before users are allowed to play on the structure.

^{* =} Determined By Your Order



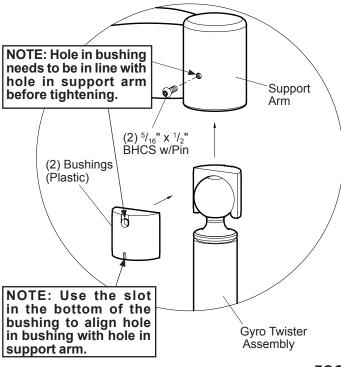
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

178242a

NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.

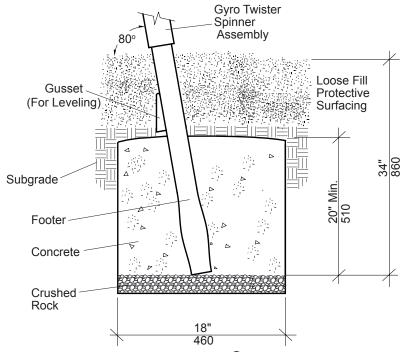
GYRO TWISTER SPINNER ASSEMBLY

DETAIL



Crushed Rock

DETAIL FOOTER ATTACHMENT



PlayBooster®

201546 Gyro Twister® Spinner

Sheet 2 of 2

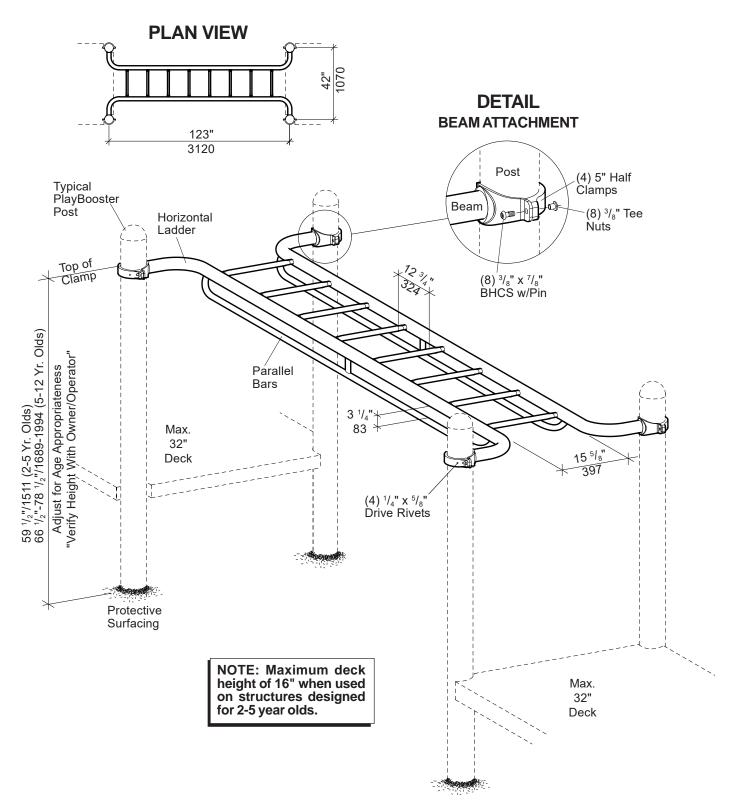






Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

14925200



PlayBooster® 119430 Overhead Parallel Bar /H.L.

Iandscape structures

PlayBooster® 119430 Overhead Parallel Bar/H.L.

Parts List

| Part# | Description | ety. |
|--------|-----------------------------------------------------------------------------------|------|
| 145939 | Overhead Parallel Bars, Specify Color | 1 |
| 105327 | 5" Half Clamp, Specify Color | 4 |
| 100610 | ¹ / ₄ " x ⁵ / ₈ " Drive Rivet, AL/SST | 4 |
| 149233 | Horizontal Ladder, Hardware Package | 1 |
| 100196 | ³ / ₈ " x ⁷ / ₈ " BHCS w/Pin, SST | 8 |
| 100351 | ³ / ₈ " Tee Nut, SST | 8 |

Specifications

Overhead

Parallel Bars: Weldment comprised of 2.375" O.D. RS-40 (.130"-

.140") galvanized steel tubing 1.315" O.D. x RS-20 (.080"-.090") galvanized steel tubing and ¹/₄" HRPO flat steel. Finish: ProShield, color specified.

Clamp: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F

879 unless otherwise indicated (see specific product

installation/specifications).

Installation Time: Approx. 1 man hour

Area Req.: 6'(1,83 m) minimum use zone

Weight: 115 lbs

Max. Fall Height: 60" (1,52 m) 2-5 Yr. Olds.

67"-79" (1,70 m - 2,10 m) 5-12 Yr. Olds.

- Mark posts for the appropriate height of the overhead parallel bar. Adjust height for age appropriateness.
- 2) Lift overhead parallel bar into position and attach to posts using 5" half clamps with $\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/pin and $\frac{3}{8}$ " tee nuts.
- 3) Be sure overhead parallel bar is level, if not, adjust clamps to do so.
- Install ¹/₄" x ⁵/₈" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- Install protective surfacing before users are allowed to play on the structure.

landscape structures

- SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487, SECTION 9.)



13871600

Post Specifications: Post length shall vary depending upon the intended use and shall be a minimum of 42" above the deck height. All posts shall be powdercoated to specified color. All posts shall have a "finished grade marker" positioned on the post identifying the 34" bury line (or 44" bury line for posts for 96" decks) required for correct installation and the top of the loose fill protective surfacing. Top caps for posts shall be aluminum die cast from 369.1 alloy and powdercoated to match the post color. All caps shall be factory installed and secured in place with (3) self sealing rivets. A molded low density polyethylene cap, with drain holes, shall be pressed onto the bottom end of the post to increase the footing area.

Steel Posts: All steel PlayBooster posts are manufactured from 5" O.D. tubing with a wall thickness of .120" and shall be galvanized after rolling and shall have both the I.D.and the cut ends sprayed with a corrosion resistant coating.

Aluminum Posts: All aluminum PlayBooster posts are manufactured from 6005-T5 extruded tubing conforming to ASTM B-221. Posts shall have a 5" outside diameter with a .125" wall thick-

> Finished Grade Sticker

Subgrade

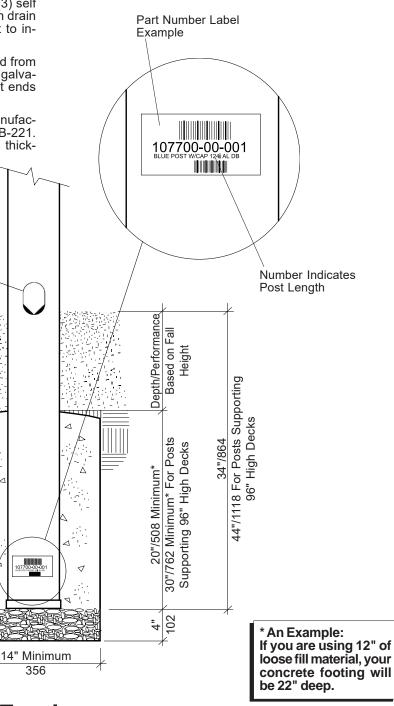
Crushed Rock

1.87 Cubic Feet per Footing:

3000 PSI (Min.) If Freezing

LOOSE FILL

PROTECTIVE SURFACING



PlayBooster

CONCRETE

2000 PSI (Min.)

Conditions Exist.

Concrete Footings, 5" Posts

356

4

4

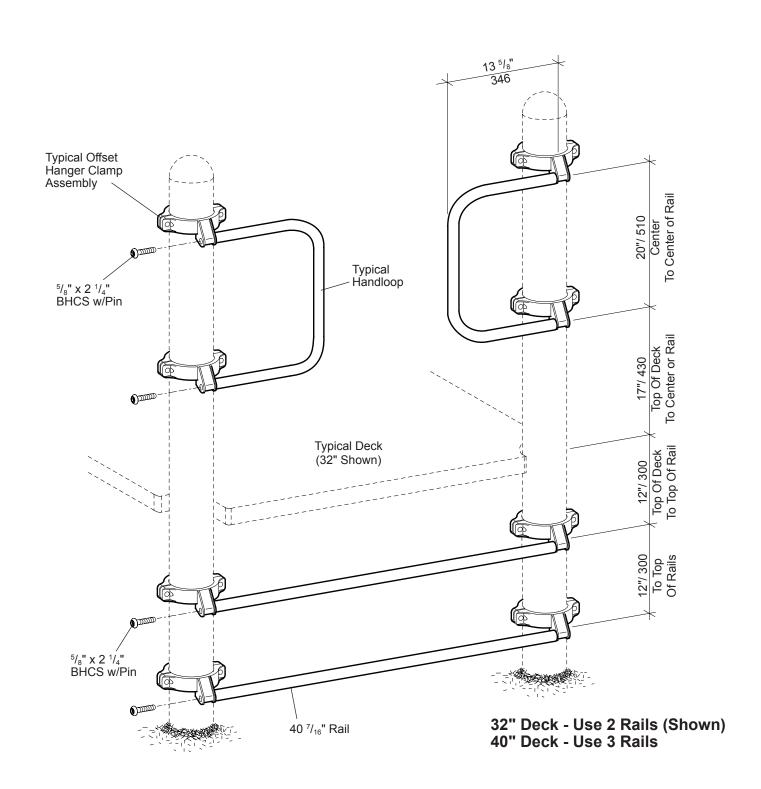






Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

10971300



Rail/Handloop Assembly

₩ landscape

PlayBooster® Rail/Handloop Assembly

Parts List

| Part# | Description | Qty |
|--------|---------------------------------------------------------------------------------|-----|
| 111275 | Handloop Assembly | 1 |
| 108542 | Handloop, Specify Color | 1 |
| 100198 | ³ / ₈ " x 1 ¹ / ₈ " BHCS w/Pin, SST | 4 |
| 100203 | ⁵ / ₈ " x 2 ¹ / ₄ " BHCS w/Pin, SST | 2 |
| 100351 | ³ / ₈ " Tee Nut, SST | 4 |
| 100610 | ¹ / ₄ " x ⁵ / ₈ " Drive Rivet, SST | 2 |
| 105327 | 5" Half Clamp, Specify Color | 2 |
| 113729 | Offset Hanger Clamp, Specify Color | 2 |
| 111276 | Rail Assembly | 1 |
| 108569 | Rail, Specify Color | 1 |
| 100198 | ³ / ₈ " x 1 ¹ / ₈ " BHCS w/Pin, SST | 4 |
| 100203 | ⁵ / ₈ " x 2 ¹ / ₄ " BHCS w/Pin, SST | 2 |
| 100351 | ³ / ₈ " Tee Nut, SST | 4 |
| 100610 | ¹ / ₄ " x ⁵ / ₈ " Drive Rivet, SST | |
| 105327 | 5" Half Clamp, Specify Color | 2 |
| 113729 | Offset Hanger Clamp, Specify Color | 2 |

Specifications

Handloop: Weldment comprised of 1.125" O.D. 11 GA (.120")

steel tubing with 203 or 303 stainless steel inserts, with $^5/_8$ " internal thread. Finish: TenderTuffTM, color

specified.

Rail: Weldment comprised of 1.125" O.D. 11 GA (.120")

steel tubing with 203 or 303 stainless steel inserts, with ${}^{5}/{}_{8}$ " internal thread. Finish: TenderTuffTM, color

specified.

Offset Hanger

Clamp Assembly: Cast aluminum. Finish: ProShield®, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tam-

perproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product

installation/specifications).

Installation Time: Approx. ³/₄ man hour

Weight: 111275-00 (One) 11 lbs.

111276-00 (One) 11 lbs.

- 1) Mark locations of clamps on posts per dimensions on front of sheet.
- Attach offset clamps to ends of rails/handloops using ⁵/₈" x 2 ¹/₄" BHCS w/pin.
- 3) Position rail/handloop on marked position on posts and attach using 5" half clamps and ³/₈" x 1 ¹/₈" BHCS w/pin with ³/₈" tee nuts. Refer to the Typical Offset Hanger Clamp Assembly Sheet.
- Install drive rivets in half clamps per the Typical Offset Hanger Clamp Assembly Sheet.
- Install protective surfacing before users are allowed to play on the structure





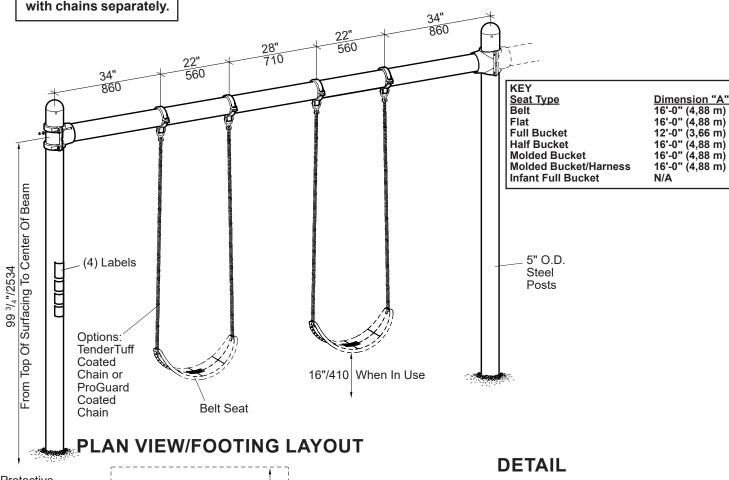


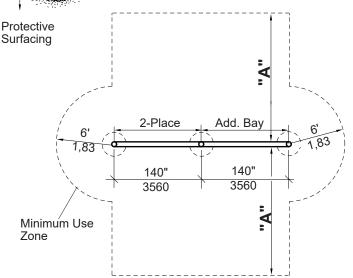
SAFETY NOTE

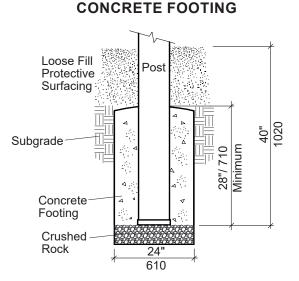
Choose a protective surfacing material that has a Critical Height Value of at least the

has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

NOTE: Model numbers are for swing frames only, order swing seats with chains separately.







Model #177333 Additional Bay

Swings 177332/177333 Single Post Swing Frame

Iandscape structures

Swings 177332/177333 Single Post Swing Frame

Parts List

| Part# | Description Qty. 2 Pl Add Bay |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 216492 220966 105327 100610 | Swing Beam, Specify Color 1 1 148" Steel Post Assy., Specify Color 2 1 5" Half Clamp, Specify Color 8 4* 1/4X5/8i DRV, Rivet, AS 8 8 |
| 121291 121289 127068 138917 100667 | Swing Hanger Clamp Assy. Specify Color44Swing Hanger Clamp, Specify Color44 $7/_{16}$ " x 2 $7/_{16}$ " BHCS w/Pin Ltd. Thread, SST44Swing Hanger Double Clevis44Oilite Bushing44 |
| 243802 100198 234397 100292 100351 156846 234937 182213 182212 115176 100330 | Hdw Pkg 5iOD Swing Beam. 1 1 $^3/_8$ " x 1 $^{1}/_8$ " BHCS w/Pin, SST 8 8 BHCS 6LP LTHD 7/16 x 1 11/16i, SSTST 8 8 $^3/_8$ " x 1 $^{1}/_4$ "BHCS w/Pin Ltd. Thread, SST 4 4 $^3/_8$ " Tee Nut, SST 8 8 Play Safe Label, 2-12 Yrs 1 1 $^7/_{16}$ " D Cut Washer, SST 16 16 Hot Surface Warning Label 1 1 Entanglement Warning Label 1 1 Hard Surface Warning Label 1 1 $^7/_{16}$ " Nylok Hex Nut 8 8 |

^{* = 5&}quot; Half Clamps From 2 PL. End Of Beam Need To Be Used.

Specifications

Post: See PlayBooster® (PB) General Specifications.

Weldment comprised of tee clamps and 5" O.D. extruded 6005-T5 aluminum alloy tube with a .125" wall. Finish: ProShield®, color specified.

Clamp: Cast aluminum. Finish: ProShield,, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: 2-Place - Approx. 6 man hours

Additional Bay - Approx. 3 man hours

Concrete Req.: 2-Place - Approx. 14 cu. ft.

Additional Bay - Approx. 7 cu. ft.

Area Req: 2-Place - 24'-1" x 24' (7,3 m x 7,31 m) Full bucket seats.

2-Place - 24'-1" x 32' (7,3 m x 9,75 m) For all other seats. **Additional Bay** - 11'-8" x 24' (3,56 m x 7,31 m) Full bucket

seats.

Additional Bay - 11'-8" x 32' (3,56 m x 9,75 m) For all

other seats.

Weight: 2-Place - 206 lbs.

Additional Bay - 122 lbs.

Installation Instructions

- 1) Dig footings spaced as shown. Refer to Concrete Footing Detail.
- 2) Set posts in footing holes and attach swing beam using 5" half clamps with ⁷/₁₆" BHCS w/Pin, ⁷/₁₆" D-Cut Washers, and ⁷/₁₆" Nylok nuts. Refer to the Swing Beam Attachment Detail. Center of beam should be 99 ³/₄" above finished grade. When installing back to back swing beams refer to the Back To Back Tee Clamps Detail. NOTE: Tighten all BHCS w/pin equally.
- Level beam and plumb posts and temporarily prop in position. Pour concrete footings and let cure for 72 hours before proceeding.
- 4) Locate, mark and attach swing hanger clamps to beam in locations shown. Refer to the Swing Hanger Clamp Attachment Detail.
- NOTE: Refer to specific swing seat installation document for attaching chains and seats.
- 6) Install ¹/₄" x ⁵/₈" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet. Refer to the Back To Back Tee Clamps Detail.
- 7) Apply Play Safe and Warning Labels, as shown.
- Install protective surfacing before users are allowed to play on the swing.

ECO# 0102179 Document 30164000 replaces 24382000 Change to molded seat w/harness use zone



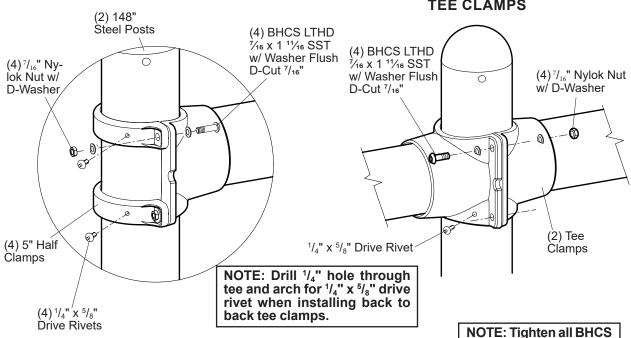




Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

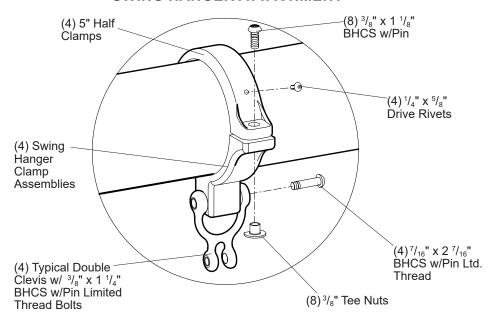
DETAILBEAM ATTACHMENT

DETAIL BACK TO BACK TEE CLAMPS



DETAIL SWING HANGER ATTACHMENT

NOTE: Tighten all BHCS w/Pin equally.



177332/177333 Single Post Swing Frame

Swings

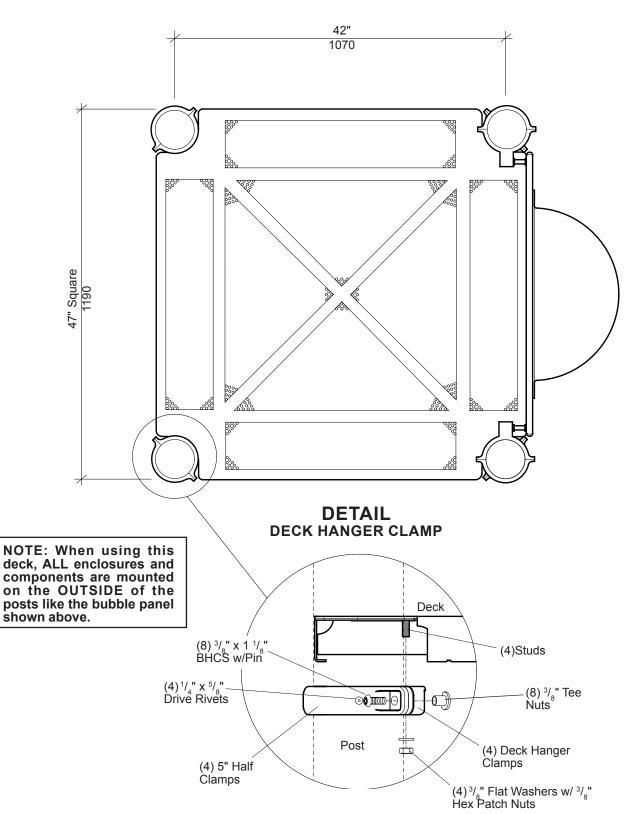






Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

14582100



PlayBooster®

111228 Square Deck



PlayBooster® 111228 Square Deck

Parts List

| Part# | Description | Qtv |
|--------|---------------------------------------------------------------------------------|-----|
| 145656 | Tenderdeck, Specify Color | 1 |
| 105327 | 5" Half Clamp, Specify Color | |
| 106022 | 5" Deck Hanger Clamp, Specify Color | |
| 119491 | Hardware Package | 1 |
| 100198 | ³ / ₈ " x 1 ¹ / ₈ " BHCS w/Pin, SST | 8 |
| 100321 | ³ / ₈ " Hex Patch Nut, SST | |
| 100351 | ³ / ₈ " Tee Nut, SST | |
| 100362 | ³ / _o " Flat Washer, SST | |
| 100610 | 1/4" x 5/8" Drive Rivet, SST | |

Specifications

Square Deck: Flange formed from 12 GA (.105") sheet steel

conforming to ASTM A1011. Standing surface is perforated with ${}^{5}/{}_{16}$ " diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size measures 2 ${}^{5}/{}_{9}$ " x 47" x 47". Finish:

TenderTuffTM, color specified.

Deck Hanger

Clamp Assembly: Cast aluminum. Finish: ProShield®, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tam-

perproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product

installation/specifications).

Installation Time: Approx. 1 man hour

Weight: 119 lbs.

- 1) Mark posts for the appropriate height of the deck you are installing.
- Fasten hanger clamps to marked position on posts. See Detail on front of sheet.
- 3) Lift deck into position, lining up studs underneath deck with deck hanger clamp as shown. Attach with ³/₈" flat washers and ³/₈" hex patch nuts
- 4) Level deck and plumb posts. Install the drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- After all enclosures/components are installed, pour concrete footings per the Typical Concrete Footing Detail Sheet.
- Install protective surfacing before users are allowed to play on the structure.

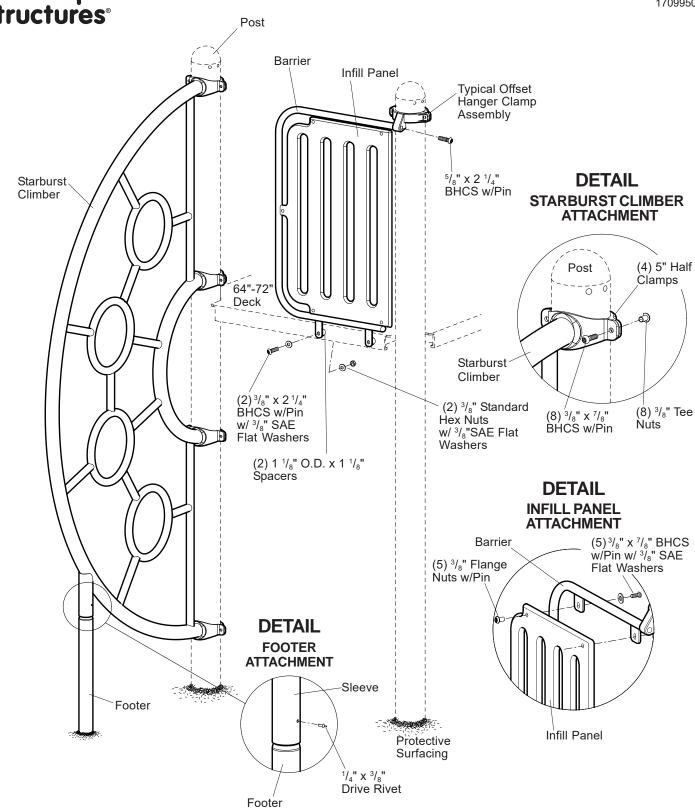






Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487)

17099500



PlayBooster® 158425 Starburst™ Climber



Parts List

| Part# | Description | Qty. |
|--------|--------------------------------------------------------------------------------------------------|------|
| 100610 | ¹ / ₄ " x ⁵ / ₈ " Drive Rivet, AL/SST | 5 |
| 105327 | 5" Half Clamp, Specify Color | 5 |
| 113729 | 5" Offset Hanger Clamp, Specify Color | 1 |
| 170930 | Barrier, Specify Color | 1 |
| 170931 | Infill Panel, Specify Color | |
| 151072 | 1 ¹ / ₈ " O.D. x 1 ¹ / ₈ " AL. Spacer, Specify Color | 2 |
| 158010 | Starburst Climber, Specify Color | 1 |
| 158027 | Footer, Specify Color | 1 |
| | | |
| 170992 | Starburst Climber Hardware Package | |
| 100196 | ³ / ₈ " x ⁷ / ₈ " BHCS w/Pin, SST | 13 |
| 100198 | ³ / ₈ " x 1 ¹ / ₈ " BHCS w/Pin, SST | 2 |
| 100199 | ³ / ₈ " x 2 ¹ / ₄ " BHCS w/Pin, SST | 2 |
| 100203 | ⁵ / ₈ " x 2 ¹ / ₄ " BHCS w/Pin, SST | |
| 100327 | 3/8" Standard Hex Nut, SST | 2 |
| 100351 | ³ / ₈ " Tee Nut, SST | |
| 100353 | ³ / ₈ " Flange Nut w/Pin, SST | 5 |
| 100365 | ³ / ₈ " SAE Flat Washer, SST | 9 |
| 100611 | ¹ / ₄ " x ³ / ₈ " Drive Rivet, AL/SST | 1 |

Specifications

Starburst Climber: Weldment comprised of 2.375" O.D. RS20 (.095"

.105" wall) galvanized steel tube, 1.315" O.D. RS20 (.080"-.090" wall) galvanized steel tube and 1/4" HRPO flat steel. Finish: ProShield®, color specified.

Fabricated from 2.375" O.D. RS20 (.095"-.105" wall)

galvanized steel tube. Finish: ProShield, color speci-

fied.

Infill Panel: Solid color Permalene®, color specified.

Barrier: Weldment comprised of 1.125" O.D. 11 Ga. (.120") steel tube per ASTM A513 with 203 or 303 stainless

steel threaded inserts with ${}^5/{}_8$ " internal threads and ${}^1/{}_4$ ' tabs. Finish: TenderTuffTM, color specified.

Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM

F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: $2^{1/2}$ man hours Weight: 123 lbs.

Concrete: Approx. 1.2 cu. ft. 75" (1,91 m) 64" Deck Fall Height:

83" (2,11 m) 72" Deck

- 1) Dig footing to depth and spacing, as shown.
- Attach offset hanger clamp assembly to post at height shown, using 5" half clamp, $\frac{3}{8}$ " x 1 $\frac{1}{8}$ " BHCS w/pin and $\frac{3}{8}$ " tee nuts. Refer to the Clamp Attachment Details.
- Attach barrier to offset hanger clamp assembly using ⁵/₈" x 2 ¹/₄" BHCS w/pin.
- Place 1 ¹/₈" O.D. x 1 ¹/₈" spacers between barrier tabs and deck. Attach barrier to deck using $\sqrt[3]{8}$ " x $2\sqrt[1]{4}$ " BHCS w/pin with $\sqrt[3]{8}$ " SAE flat washers and $\frac{3}{8}$ " standard hex nuts with $\frac{3}{8}$ " SAE flat washers.
- Attach infill panel to barrier using $\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/pin with $\frac{3}{8}$ " SAE flat washers and 3/8" flange nuts w/pin. Refer to the Infill Panel Attachment Detail.
- Insert footer into starburst climber sleeve. Drill through hole in sleeve and into support with a $^{1}/_{4}$ " or "F" (only) drill bit. Insert $^{1}/_{4}$ " x $^{3}/_{8}$ " rivet into hole and hammer rivet pin in until it is flush with head. Refer to the Footer Attachment Detail.
- Lift starburst climber into position and attach to post at dimension shown, using 5" half clamps with $\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/pin and $\frac{3}{8}$ " tee nuts. Refer to Detail.
- Install $\frac{1}{4}$ " x $\frac{5}{8}$ " drive rivets in all 5" half clamps. Drill through hole in 5" half clamps and into 5" post with a 1/4" or "F" (only) drill bit, insert drive rivet in hole through clamp and into post. Hammer drive rivet pin in until flush with head. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- With starburst climber in plumb position, pour concrete footing. Allow concrete footing to cure for a minimum of 72 hours before users are allowed to play on the structure.
- 10) Install protective surfacing before users are allowed to play on the structure.

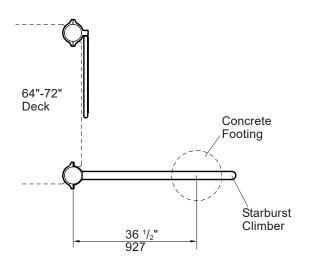
M landscape structures°

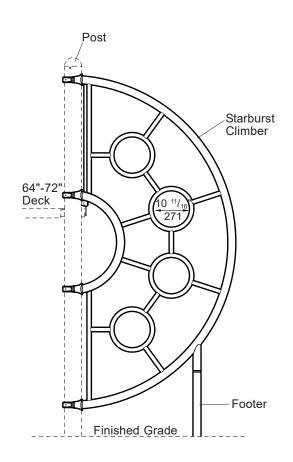
SAFETY NOTE

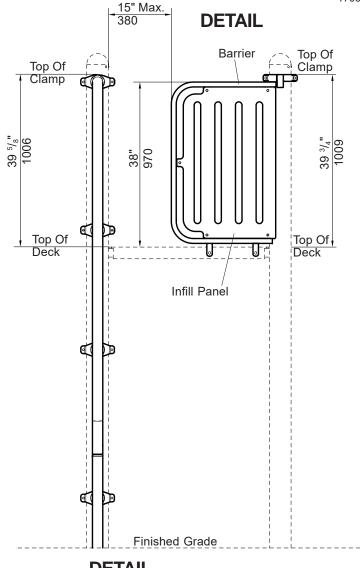
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487)

170995a

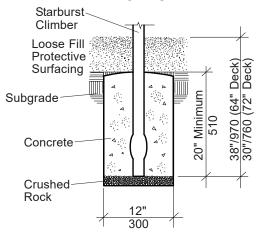
PLAN VIEW FOOTING LAYOUT







DETAILDIRECT BURY



PlayBooster®

158425 Starburst[™] Climber

Sheet 2 of 2

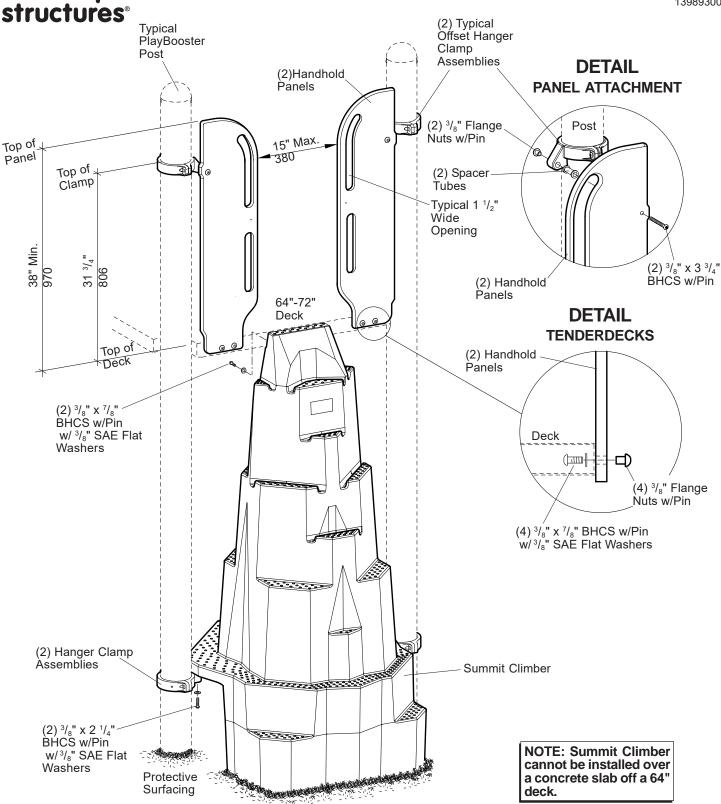






Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM

13989300



PlayBooster®

128608 Summit Climber™, 64"-72" Deck

PlayBooster® 128608 Summit Climber™, 64"-72" Deck



Parts List

| Part# | Description | Qty. |
|--------|-----------------------------------------------------------------------------------|------|
| | Single Summit Climber | |
| 126791 | Summit Climber, Specify Color | 1 |
| 139563 | Handhold Panel, Specify Color | |
| 105327 | 5" Half Clamp, Specify Color | |
| 113729 | Offset Hanger Clamp, Specify Color | |
| 121289 | Hanger Clamp, Specify Color | 2 |
| 100610 | ¹ / ₄ " x ⁵ / ₈ " Drive Rivet, AL/SST | 4 |
| 113468 | Spacer Tube, Specify Color | 2 |
| 139894 | Summit Climber (Single) Hardware Package. | 1 |
| 100196 | ³ / ₈ " x ⁷ / ₈ " BHCS w/Pin, SST | 6 |
| 100198 | ³ / ₈ " x 1 ¹ / ₈ " BHCS w/Pin, SST | |
| 100199 | ³ / ₈ " x 2 ¹ / ₄ " BHCS w/Pin, SST | 2 |
| 100351 | ³ / ₈ " Tee Nut, SST | 8 |
| 100353 | ³ / ₈ " Flange Nut w/Pin, SST | 6 |
| 100365 | ³ / ₈ " SAE Flat Washer, SST | 8 |
| 124460 | ³ / ₈ " x 3 ³ / ₄ " BHCS w/Pin, SST | 2 |
| | Double Summit Climber | |
| 126791 | Summit Climber, Specify Color | 2 |
| 139563 | Handhold Panel, Specify Color | |
| 105327 | 5" Half Clamp, Specify Color | 7 |
| 113729 | Offset Hanger Clamp, Specify Color | |
| 121289 | Hanger Clamp, Specify Color | |
| 100610 | ¹ / ₄ " x ⁵ / ₈ " Drive Rivet, AL/SST | |
| 113468 | Spacer Tube, Specify Color | 4 |
| 126910 | Support Plate, Specify Color | |
| 139895 | Summit Climber (Double) Hardware Package | |
| 100196 | ³ / ₈ " x ⁷ / ₈ " BHCS w/Pin, SST | |
| 100198 | ³ / ₈ " x 1 ¹ / ₈ " BHCS w/Pin, SST | 14 |
| 100199 | ³ / ₈ " x 2 ¹ / ₄ " BHCS w/Pin, SST | |
| 100351 | ³ / ₈ " Tee Nut, SST | |
| 100353 | 3/8" Flange Nut w/Pin, SST | |
| 100365 | ³ / ₈ " SAE Flat Washer, SST | |
| 113027 | ³ / ₈ " x 1 ³ / ₈ " BHCS w/Pin, SST | |
| 124460 | ³ / ₈ " x 3 ³ / ₄ " BHCS w/Pin, SST | |
| | Triple Summit Climber | |
| 126791 | Summit Climber, Specify Color | 3 |
| 139563 | Handhold Panel, Specify Color | |
| 105327 | 5" Half Clamp, Specify Color | |
| 113729 | Offset Hanger Clamp, Specify Color | |
| 121289 | Hanger Clamp, Specify Color | |
| 100610 | 1/4" x 5/8" Drive Rivet, AL/SST | |
| 113468 | Spacer Tube, Specify Color | 6 |
| 126910 | Support Plate, Specify Color | |
| 139896 | Summit Climber (Triple) Hardware Package. | |
| 100196 | ³ / ₈ " x ⁷ / ₈ " BHCS w/Pin, SST | |
| 100198 | ³ / ₈ " x 1 ¹ / ₈ " BHCS w/Pin, SST | 20 |
| 100199 | ³ / ₈ " x 2 ¹ / ₄ " BHCS w/Pin, SST | 4 |
| 100351 | 3/ ₈ " Tee Nut, SST | |
| 100353 | ³ / ₈ " Flange Nut w/Pin, SST | |
| 100365 | 3/8" SAE Flat Washer, SST | |
| 113027 | ³ / ₈ " x 1 ³ / ₈ " BHCS w/Pin, SST | 2 |
| 124460 | ³ / ₈ " x 3 ³ / ₄ " BHCS w/Pin, SST | |
| -200 | | 0 |

Specifications

Summit Climber: Rotationally molded from U.V. stabilized linear low

density polyethylene, color specified.

Handhold Panel: Solid color Permalene®, color specified.

Support Plate: Fabricated from 7 GA (.179") HRPO flat steel. Fin-

ish: ProShield®, color specified.

Spacer Tube: Made from 6061-T6 aluminum $\frac{7}{8}$ " O.D. x 1 $\frac{11}{16}$ ".

Finish: ProShield, color specified.

Hanger

Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned

tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific prod-

uct installation/specifications).

Installation Time: Single Approx. 2 man hours

Double Approx. 4 man hours Triple Approx. 6 man hours

Weight: Single 100 lbs.

Double 199 lbs. Triple 298 lbs.

Fall Height: Deck Height

Installation Instructions

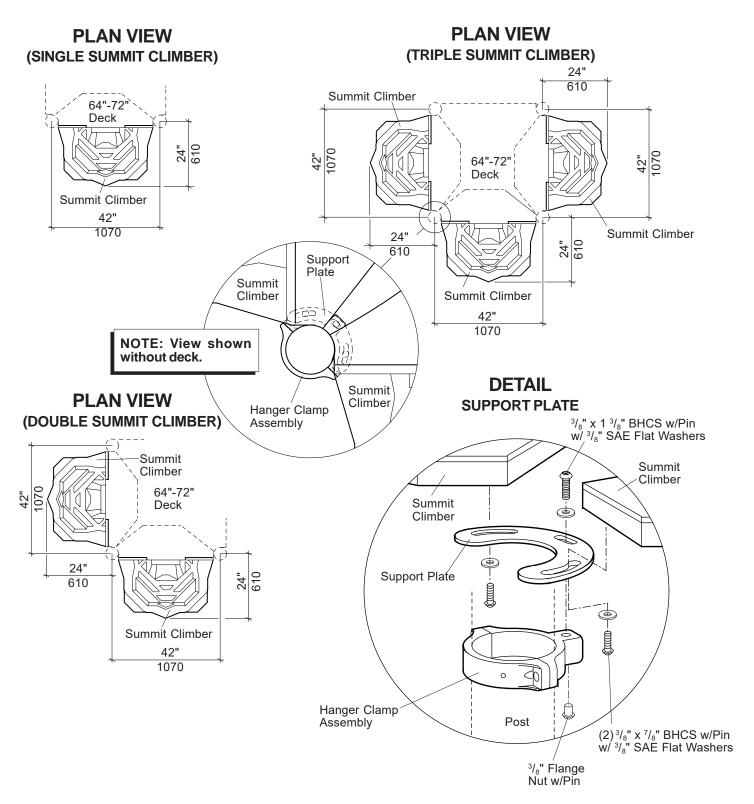
- 1) Attach offset hanger clamps to posts at height shown using 5" half clamps, $\frac{3}{8}$ " x 1 $\frac{1}{8}$ " BHCS w/pin and $\frac{3}{8}$ " tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 2) Attach handhold panels to the face of the deck using ³/₈" x ⁷/₈" BHCS w/pin with ³/₈" SAE flat washers and ³/₈" flange nuts w/pin. Refer to the Tenderdeck Detail.
- 3) Attach handhold panels to the offset hanger clamp assemblies using ³/₈" x 3 ³/₄" BHCS w/pin, spacer tubes and ³/₈" flange nuts w/pin. Refer to the Panel Attachment Detail.
- 4) Attach summit climber or climbers to the face of the deck using $\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/pin with $\frac{3}{8}$ " SAE flat washers, as shown.
- 5) (Single Summit Climber) Attach hanger clamps to summit climber using 3/8" x 2 1/4" BHCS w/pin with 3/8" SAE flat washers. Attach hanger clamps to posts using 5" half clamps, 3/8" x 1 1/8" BHCS w/pin and 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.

(Double Summit Climber) Attach the support plate to the hanger clamp using $^{3}/_{8}$ " x 1 $^{3}/_{8}$ " BHCS w/pin with $^{3}/_{8}$ " SAE flat washer and $^{3}/_{8}$ " flange nut w/pin. Attach the support plate to the summit climbers using $^{3}/_{8}$ " x $^{7}/_{8}$ " BHCS w/pin with $^{3}/_{8}$ " SAE flat washers. Refer to the Support Plate Detail. Attach hanger clamp to the post using 5" half clamp, $^{3}/_{8}$ " x 1 $^{1}/_{8}$ " BHCS w/pin and $^{3}/_{8}$ " tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet. Refer to the Single Summit Climber Instruction above for the outer hanger clamp assembly.

(**Triple Summit Climber**) Attach the support plates to the hanger clamps using $^3/_8$ " x 1 $^3/_8$ " BHCS w/pin with $^3/_8$ " SAE flat washers and $^3/_8$ " flange nuts w/pin. Attach the support plates to the summit climbers using $^3/_8$ " x $^7/_8$ " BHCS w/pin with $^3/_8$ " SAE flat washers. Refer to the Support Plate Detail. Attach hanger clamps to the posts using 5" half clamps, $^3/_8$ " x 1 $^1/_8$ " BHCS w/pin and $^3/_8$ " tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet. Refer to the Single Summit Climber Instruction above for the outer hanger clamp assembly.

 Install protective surfacing before users are allowed to play on the structure.





128608 Summit Climber™, 64"-72" Deck





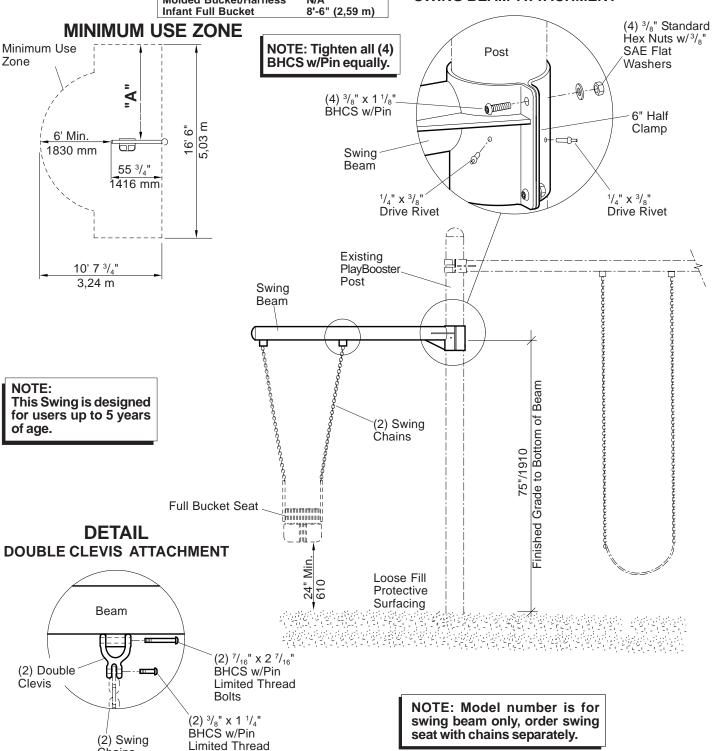


SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487)

17745000

DETAILSWING BEAM ATTACHMENT



Swings 177337 Toddler Swing Add-On Beam, No Post

Chains

Bolts

Iandscape structures

Swings 177337 Toddler Swing Add-On Beam, No Post

Parts List

| Part# | Description Qty |
|-----------|------------------------------------------------------------------------------------------------------|
| 135548-00 | Swing Beam, Specify Color 1 |
| 154322-00 | 6" Half Clamp, Specify Color 1 |
| 116882-00 | Beam Hardware Package 1 |
| 100198-00 | ³ / ₈ " x 1 ¹ / ₈ " BHCS w/Pin, SST 4 |
| 100327-00 | ³ / ₈ " Standard Hex Nut, SST 4 |
| 100365-00 | ³ / ₈ " SAE Flat Washer, SST |
| 100611-00 | $^{1}/_{4}$ " x $^{3}/_{8}$ " Drive Rivet, AL/SST |
| 132634-00 | Double Clevis Hardware Package 1 |
| 127068-00 | ⁷ / ₁₆ " x 2 ⁷ / ₁₆ " BHCS w/Pin Ltd. Thread Bolt, SST 2 |
| 100292-00 | ³ / ₈ " x 1 ¹ / ₄ " BHCS w/Pin Ltd. Thread Bolt, SST 2 |
| 138917-00 | Double Clevis |

Specifications

Swing Beam: Weldment comprised of 3.500" O.D. RS-20 (.120" -

.130") galvanized steel tubing, 6" wide zinc plated steel clamp, 3.500" pipe cap, and 1 $^{1}/_{4}$ " housings with bronze bushings. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned

tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific prod-

uct installation/specifications).

Installation Time: Approx. 1 man hour

Area Req.: $10^{17} \, ^{3}/_{4}$ " x 17' (3,24 m x 5,18 m)

Weight: 31 lbs.

Installation Instructions

- Attach swing beam to post using 6" half clamp, ³/₈" x 1 ¹/₈" BHCS w/pin and ³/₈" standard hex nuts with ³/₈" SAE flat washers. Refer to the Swing Beam Attachment Detail. NOTE: Tighten all (4) BHCS w/pin equally.
- 2) Attach double clevises to beam using ⁷/₁₆" x 2 ⁷/₁₆" BHCS w/pin limited thread bolts, and attach swing chains to double clevises using ³/₈" x 1 ¹/₄" BHCS w/pin limited thread bolts. Refer to the Double Clevis Attachment Detail.
- 3) Install Swing Seat per the installation sheet.
- 4) Drill through hole in 6" half clamp and into post with a ¹/₄" or "F" (only) drill bit. Install ¹/₄" x ³/₈" drive rivet. Refer to the Swing Beam Attachment Detail.
- 5) Drill through hole in swing beam and into post with a ¹/₄" or "F" (only) drill bit. Install ¹/₄" x ³/₈" drive rivet. Refer to the Swing Beam Attachment Detail.
- Install protective surfacing before users are allowed to play on the structure.

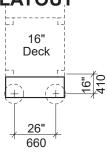
Mandscape structures

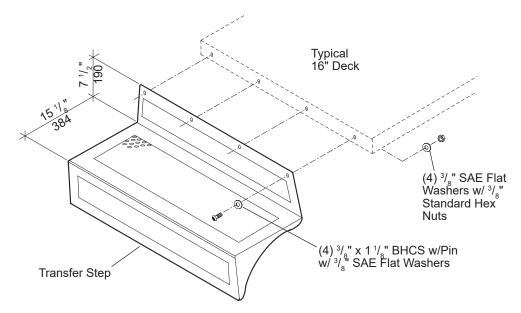




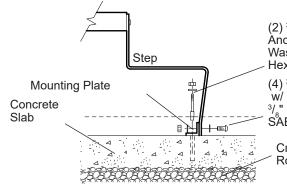
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

PLAN/FOOTING LAYOUT





SURFACE MOUNT 2"

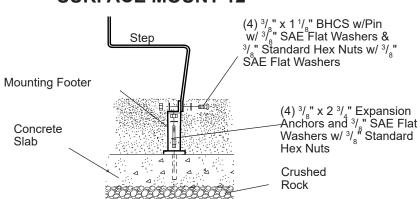


(2) $^3/_8$ " x 2 $^3/_4$ " Expansion Anchors and $^3/_8$ " SAE Flat Washers w/ $^3/_8$ " Standard Hex Nuts

(4) $^3/_8$ " x 1 $^1/_8$ " BHCS w/Pin w/ $^3/_8$ " SAE Flat Washers & $^3/_8$ " Standard Hex Nuts w/ $^3/_8$ " SAE Flat Washers

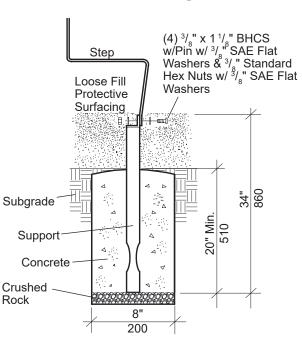
Crushed Rock

SURFACE MOUNT 12"



NOTE: Sufficient protective surfacing must cover hardware to satisfy fall height requirements.

DIRECT BURY



PlayBooster®

112471 Transfer Step

PlayBooster® 112471 Transfer Step

Parts List

| Part# | | Qty |
|--------|----------------------------------------------------------------------------------|------|
| 149024 | Transfer Step, Specify Color | |
| 181342 | Transfer Step, Support (DB), Specify Color | 1 |
| 181343 | Transfer Step, Mounting Plate 2" (SM), Specify Color | . 1 |
| 181344 | Transfer Step, Mounting Plate 12" (SM), Specify Colo | or 1 |
| 125741 | Transfer Step Leg Hardware Package (DB) | 1 |
| 100198 | ³ / ₈ " x 1 ¹ / ₈ " BHCS w/Pin, SST | 4 |
| 100327 | ³ / ₈ " Standard Hex Nut, SST | |
| 100365 | ³ / ₈ " SAE Flat Washer, SST | 8 |
| 125740 | Transfer Step Leg Hardware Package (SM) | 1 |
| 100198 | ³ / ₈ " x 1 ¹ / ₈ " BHCS w/Pin, SST | 4 |
| 100263 | ³ / ₈ " x 2 ³ / ₄ " Expansion Anchor | 2 |
| 100327 | ³ / ₈ " Standard Ĥex Nut, SST | 6 |
| 100365 | ³ / ₈ " SAE Flat Washer, SST | .10 |
| 127148 | Transfer Step Hardware Package | 1 |
| 100198 | ³ / ₈ " x 1 ¹ / ₈ " BHCS w/Pin, SST | 4 |
| 100365 | ³ / ₈ " SAE Flat Washer, SST | 8 |
| 100327 | ³ / ₈ " Standard Hex Nut, SST | 4 |
| 302433 | HDW XFR STEP SPRT 12iSM | 1 |
| 100198 | BHCS 6LP 3/8x1-1/8i SST | 4 |
| 100266 | EXP ANCHOR 1/2x2-3/4i ZP | 4 |
| 100322 | NUT HEX STD 1/2-13 SST | 4 |
| 100327 | NUT HEX STD 3/8-16 SST | 4 |
| 100363 | WASHER FLAT 1/2i SST | |
| 100365 | WASHER FLAT SAE 3/8i SST | |

DB = Direct Bury SM = Surface Mount

Specifications

Formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Finish: TenderTuff™, color specified.

Weldment comprised of 1.660 O.D. RS20 (.080"-.095) and $1\frac{3}{4}$ " x $1\frac{3}{4}$ " x $1\frac{3}{8}$ " HR angle. Finish: **Step Support:**

ProShield®, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tam-

perproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product

installation/specifications).

Installation Time: Approx. 1 man hour

DB - 1 cu. ft. Concrete Req.: **SM** - 46 lbs. Weight:

DB - 55 lbs.

Installation Instructions

Direct Bury

- Dig footings spaced as shown.
- Attach transfer step support to transfer step using $^{3}/_{8}$ " x 1 $^{1}/_{8}$ " BHCS w/ pin with $\frac{3}{8}$ " SAE flat washers and $\frac{3}{8}$ " standard hex nuts with $\frac{3}{8}$ " SAE flat washers.
- Attach transfer step to deck using ³/₈" x 1 ¹/₈" BHCS w/pin with ³/₈" SAE flat washers and $^3/_8$ " standard hex nuts with $^3/_8$ " SAE flat washers as shown.
- With deck and steps in level position, pour concrete footings. Allow concrete to cure for a minimum of 72 hours before users are allowed to play on the structure.
- Install protective surfacing before users are allowed to play on the structure.

Surface Mount

- Attach transfer step mounting plate to transfer step using ³/₈" x 1 ¹/₈" BHCS w/pin with ³/₈" SAE flat washers and ³/₈" standard hex nuts with ³/_s" SAE flat washers.
- Attach transfer step to deck using $\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/pin with $\frac{3}{8}$ " SAE flat washers and $^3/_8$ " standard hex nuts with $^3/_8$ " SAE flat washers as
- Mark holes for expansion anchors on concrete slab through step mounting plate.
- Detach step from deck and drill ³/₈" x 3" deep holes into concrete on marks using ³/₈" masonry bit and hammer drill.
- Reattach transfer step to deck. 5)
- 6) With step over drilled holes, tap expansion anchors into drilled holes. Secure using $\frac{3}{8}$ " standard hex nuts with $\frac{3}{8}$ " SAE flat washers.
- Install protective surfacing before users are allowed to play on the structure.

ECO# 0102180 Document 30243400 replaces 18134600, Add 12" SM details and updated HDW



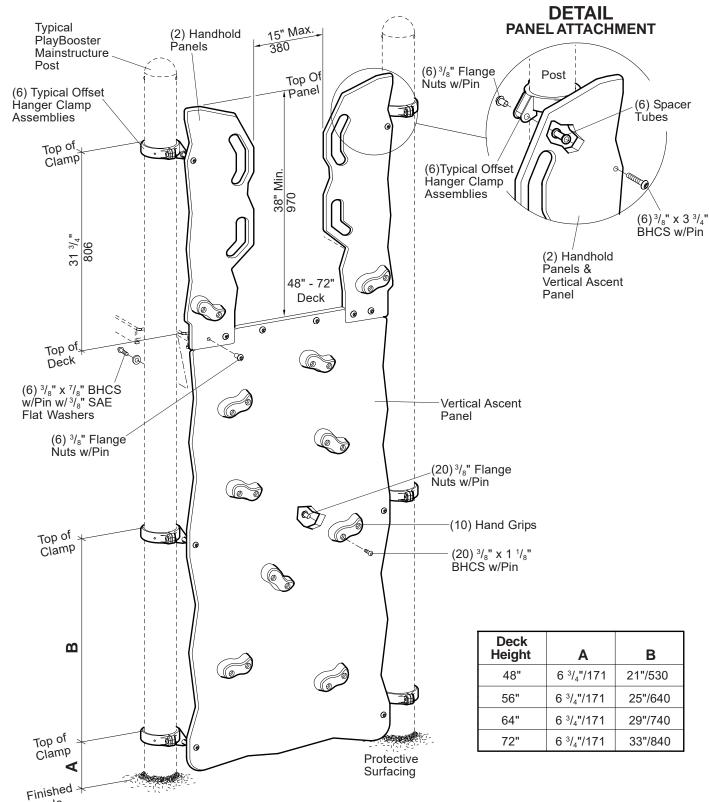




SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487)

15489700



PlayBooster® 145624

145624 Vertical Ascent®, 48"-72"

Grade

PlayBooster® 145624 Vertical Ascent®, 48"-72"



Parts List

| Part# | Description Qty. |
|--------|-----------------------------------------------------------------------------------|
| 182957 | Vertical Ascent Handhold Panel, Specify Color2 |
| 145597 | Vertical Ascent Panel, 48" Deck, Specify Color 1 |
| 145596 | Vertical Ascent Panel, 56" Deck, Specify Color 1 |
| 145595 | Vertical Ascent Panel, 64" Deck, Specify Color 1 |
| 145585 | Vertical Ascent Panel, 72" Deck, Specify Color 1 |
| 105327 | 5" Half Clamp, Specify Color6 |
| 113729 | Offset Hanger Clamp, Specify Color6 |
| 113468 | Spacer Tube, Specify Color6 |
| 100610 | ¹ / ₄ " x ⁵ / ₈ " Drive Rivet, AL/SST |
| 145792 | Hand Grip Set |
| 143110 | Hand Grip, Blue2 |
| 143110 | Hand Grip, Yellow2 |
| 143110 | Hand Grip, Red3 |
| 143110 | Hand Grip, Green |
| 145616 | Vertical Ascent Hardware Package 1 |
| 100196 | ³ / ₈ " x ⁷ / ₈ " BHCS w/Pin, SST6 |
| 100198 | ³ / ₈ " x 1 ¹ / ₈ " BHCS w/Pin, SST |
| 100351 | ³ / ₈ " Tee Nut, SST |
| 100353 | ³ / ₈ " Flange Nut w/Pin, SST |
| 100365 | ³ / ₈ " SAE Flat Washer, SST |
| 124460 | ³ / ₈ " x 3 ³ / ₄ " BHCS w/Pin, SST6 |

Specifications

Hand Grip: Made from Polyester Resin. Hand Grips measure approx. 5 $^3/_4$ " long x 2 $^1/_4$ " wide x 1 $^3/_4$ " high.

Panels: Solid color Permalene®, color specified.

Spacer Tube: Made from 6061-T6 aluminum ⁷/₈" O.D. Finish:

ProShield®, color specified.

Clamps: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned

tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific prod-

uct installation/specifications).

Installation Time: Approx. 2 man hours

Weight: 48" Deck Height - 83 lbs. 56" Deck Height - 91 lbs.

64" Deck Height - 91 lbs.

72" Deck Height - 106 lbs. **Fall Height:** 53 ½"/1358 (48" Deck Height)

61 ½"/1562 (56" Deck Height) 69 ½"/1765 (64" Deck Height)

69 ¹/₂"/1765 (64" Deck Height) 77 ¹/₂"/1968 (72" Deck Height)

Installation Instructions

- 1) Attach handhold panels and vertical ascent panel to deck using $\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/pin with $\frac{3}{8}$ " SAE flat washers and $\frac{3}{8}$ " flange nuts w/pin, as shown.
- 2) Attach handhold panels and vertical ascent panel to offset hanger clamps using ³/₈" x 3 ³/₄" BHCS w/pin, spacer tubes and ³/₈" flange nuts w/pin. Refer to the Panel Attachment Detail.
- 3) Attach offset hanger clamps to posts at heights shown using 5" half clamps, ³/₈" x 1 ¹/₈" BHCS w/pin and ³/₈" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 4) Attach hand grips to handhold panels and vertical ascent panel using $\frac{3}{8}$ " x 1 $\frac{1}{8}$ " BHCS w/pin and $\frac{3}{8}$ " flange nuts w/pin, as shown.
- Install ¹/₄" x ⁵/₈" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- Install protective surfacing before users are allowed to play on the structure.

Appendix E

Technical Specifications

APPENDIX E

TECHNICAL SPECIFICATIONS

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SUMMARY OF WORK

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Work covered by the Contract, listing of Owner, Project location. Sequence requirements, the Contractor's use of the premises and Owner's occupancy requirements.

1.02 WORK COVERED BY CONTRACT DOCUMENTS

A. The work in this contract includes, but is not necessarily limited to, the removal and disposal of select hazardous play equipment and site amenities. Relocation of existing benches, tables, and play equipment. Repair of existing fencing and stone pillars. Installation of new benches, play equipment, playground safety surfacing, fencing, signage, and accessible pathways.

All as more particularly indicated, shown or described in the Drawings, Specifications, and other Contract Documents.

1.03 OWNER

A. City of Warwick

3275 Post Road

Warwick, Rhode Island 02886

Telephone: 401-921-9688

Contact: William Facente, Housing & Community Development Manager

1.04 PROJECT LOCATION

A. Pontic Village Park, 145

Greenwich Ave.

Warwick, Rhode Island 02886

1.05 WORK SEQUENCE

A. In order that Work may be conducted with minimum inconvenience to the public and, work under this Contract may be coordinated with other work which may be under construction or contemplated, and that work under the Contract may conform to conditions which it has been undertaken or conditions attached to a right-of-way or particular location for this work, the City's project manager may determine the point or points and time or times when portions of work will commence or be carried on and may issue orders pertaining to the work sequence, relative to the rate of progress on several portions of the Work.

1.06 CONTRACTOR USE OF PREMISES

- A. The Contractor's use of premises shall be within the limits of the park shown on the Drawings for the performance of the Work.
- B. The Contractor shall assume full responsibility for security of all materials and equipment on the site, including those of his subcontractor's.
- C. If directed by the Owner, the Contractor shall move any stored items that interfere with operations of the Owner.
- D. Obtain and pay for use of additional storage or work areas if needed to perform the Work.

1.07 OWNER OCCUPANCY REQUIREMENTS

A. Contractor shall maintain access to the existing train station building, parking lot, and tennis court throughout duration of construction.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

ALLOWANCES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes

1. Contingencies and their respective value which have been established in the BID as an estimated lump sum to facilitate comparison of bids only.

B. Related Sections

- 1. Section 00300 Bid
- 2. Section 01025 Measurement and Payment

1.02 ALLOWANCES

A. Allowance No 1 – Owner's Allowance

1.03 PAYMENT PROCEDURES

- A. Under these items, the Contractor shall be reimbursed for charges for the allowances required and authorized by the Owner and Owner's Representative, as detailed in Section 01025 Measurement and Payment.
- B. The lump-sum price for allowances is established in Section 00300 Bid as an estimated figure to facilitate comparison of bids only. The actual amount to be paid under this item shall constitute full compensation for services rendered.
- C. The lump-sum price for this item shall NOT include any costs associated with services rendered for routine utility markings, repair damages incurred as a result of the Contractor's operations, relocations of utilities done at the Contractor's request and/or convenience, or any other unauthorized services rendered by utility companies. The purpose of this item is strictly for the Contractor's reimbursement for those services authorized by the Owner or Owner's Representative prior to the work being performed.
- D. The Contractor will be paid based on the actual PAID invoiced amount from the authority in question as approved by the Owner or Owner's Representative. If the total cost for such charges is greater or less than the allowance amount stated under this item of the BID, a debit or credit of the difference in cost shall be to the Owner.

PART 2 PRODUCTS

2.01 MATERIALS

A. Materials as required and ordered by the Owner or Owner's Representative shall conform to the Contract Documents.

PART 3 EXECUTION

NOT USED

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes

1. Measurement and payment criteria applicable to the Work performed under a lump sum payment method of Items listed in the BID.

B. RELATED SECTIONS

- 1. Section 00300 Bid
- 2. Section 01020 Allowances
- 3. Section 01026 Schedule of Values

1.02 LUMP SUM PRICES

- A. Payment will be computed on the basis of the percentage of work completed on each item in the contract BID as determined by the Owner or Owner's Representative. Lump sum prices are to include the cost of all necessary materials, labor, equipment, overhead, profit and other applicable costs. (See Par. 1.04, this Section.)
- B. The Contractor's breakdown (submit under SECTION 01026) of the lump sum bid will be used only as a guide to determine the percentage of completion.

1.03 PRICES INCLUDE

- A. The prices stated in the Proposal include full compensation not only for furnishing all the labor, equipment and material needed for, and for performing the work and building the structures contemplated by, the Contract, but also for assuming all risks of any kind for expenses arising by reason of the nature of the soil, ground water, or the action of the elements; for all excavation and backfilling; for the removal of and delay or damage occasioned by trees, stumps, tracks, pipes, ducts, timber, masonry or other obstacles; for removing, protecting, repairing, or restoring, without cost to the Owner, all pipes, ducts, drains, sewers, culverts, conduits, curbs, gutters, walks, fences, tracks, or other obstacles, road pavements and other ground surfacing whether shown on plans or not for draining, damming, pumping or otherwise handling and removing, without damage to the work or to other parties, and without needless nuisance, all water or sewage from whatever source which might affect the work or its progress, or be encountered in excavations made for the work;
- B. The Owner shall pay and the Contractor shall receive the prices stipulated in the BID made a part hereof as full compensation for everything performed and for all risks and obligations undertaken by the Contractor under and as required by the Contract.

- C. The prices for those Items which involve excavation shall include compensation for disposal of surplus excavated material and handling water.
- D. In all Items involving excavation, the price shall be based on doing the entire excavation in earth. Where rock is excavated, the price, therefore, shall be in addition to the cost of excavating earth and no deduction will be made in the amount for earth excavation.

1.04 PAYMENT

- A. In general, payment will be made for all Contract work satisfactorily completed through the end of the previous month. The payment will include any additional work which has been completed and approved and change order work agreed upon by the Owner and Contractor which has been completed and approved.
- B. Each application for payment will indicate the total of a minimum percent retainage, held by the Owner on the total of all work completed under the contract and approved for payment todate.
- C. Monthly applications for payment may also indicate reduction or increase of the total Contract price when an approved change order results in a net reduction or net increase in the cost and quantity of work to be performed under the Contract.
- D. Special billings and charges against the Contract as credit or payment to the Owner, that are not for change order work, may be subtracted from monies due on any monthly application for payment but shall not serve to reduce the total Contract price.
- E. Final payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities accepted by the Owner or Owner's Representative multiplied by the unit price for work which is incorporated in or made necessary by the Work.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

SCHEDULE OF VALUES

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes
 - 1. Requirements for breakdown of lump sum bid.
- B. Related Sections
 - 1. Section 01300 Submittals

1.02 BREAKDOWN OF LUMP SUM BID

- A. Within 20 business days of the date of the executed Contract, a list detailing the breakdown of the lump sum bid by the appropriate Divisions of these Specifications or as otherwise directed by the Owner or Owner's Representative, shall be submitted for review and concurrence by the Owner or Owner's Representative. This list will be used by the Owner or Owner's Representative as a guide in preparing estimates for payment. The list shall be an accurate representation of costs required to complete the Work in accordance with the Contract Documents.
- B. A schedule of the monthly value of work done based on the Progress Schedule submitted under Section 01300 Submittals shall be submitted within 20 business days of the date of the executed Contract. The schedule shall show the total sum of work done for each month of the projected construction period and shall be updated monthly to reflect the actual amount requisitioned for payment.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

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MODIFICATION PROCEDURES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes

1. Procedures for making modifications to the Contract by change orders or other means.

1.02 CHANGE ORDERS

- A. In general Change Orders will be issued for modification of Contract documents which will incorporate changes in the Contract requirements, including additions or deletions in the Work; for unforeseen field conditions which will necessitate changes in the Work; changes in code provisions or other requirements of federal, state or local authority requiring changes in the Work; changes in the availability of products or for incorporating new products into the work and for changes directed by the Owner or Owner's Representative for the benefit of the Owner.
- B. Authority to execute Change Orders shall be that of the Owner or Owner's Representative and not of the Contractor. Change Orders will, in general, originate by a "Change Order Proposal Request" or by issuance of a "Construction Change Authorization".
- C. Unless authorized by the Owner or Owner's Representative, no work shall be performed that is involved in the change until a formal Change Order is issued.
- D. To initiate a Change Order, the Owner or Owner's Representative will forward a Change Order proposal request describing the proposed changes and if required, include additional or revised drawings and specifications soliciting a formal quotation of cost and time to complete the proposed Change Order work. Upon reaching mutual agreement on the cost and time, the Owner or Owner's Representative will sign his approval of the Change Order and submit it to the Contractor for his full signature of acceptance.

1.03 FIELD ORDERS

A. The Owner or Owner's Representative may, to avoid costly removal of, or alterations to, present on-going work, issue a Work Directive Change authorizing the Contractor to proceed, subject to later negotiation of the price of the change.

1.04 PRICE AGREEMENTS

A. Prices agreed upon to cover the Change Orders may be either by mutual acceptance of a lump sum or by unit prices or actual direct cost plus a

percentage for overhead, profit and other expenses.

- B. Work done by a subcontractor entitles the General Contractor a percentage of the sum of the actual direct cost, not including the subcontractor's overhead and profit.
- C. Method for computing the cost of the change shall be based on the net additional increase. No overhead and profit shall be deducted from prices for changes deleting work.
- D. The Change Order form documents shall indicate the net adjustment (+/-) to the total Contract price as a result thereof including extension or reduction of time when applicable.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

COORDINATION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Requirements for coordinating the various parts of Work under this Contract.

1.02 REQUIREMENTS

- A. Coordinate scheduling, submittals, and Work of the various Sections of specifications to assure efficient and orderly sequence of installation of interdependent construction elements.
- B. Coordinate completion and clean up of Work of separate Sections in preparation for Substantial Completion.
- C. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.
- D. Coordinate work with all utility companies necessary for completion of work under this contract.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

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FIELD ENGINEERING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Survey work and other field engineering responsibilities of the Contractor.

1.02 REQUIREMENTS

- A. The Contractor shall be responsible for layout of the work and the establishing of lines and grades.
- B. Establish elevations, lines, levels, reference marks, batter boards, etc., required during the progress of the Work. Verify such marks by instrument to confirm accuracy.
- C. Establish or locate and protect survey control and reference points.
- D. Make, check, and be responsible for all measurements and dimensions necessary for the proper construction of the Work.
- E. The Owner or Owner's Representative will be permitted to check the lines, elevations, reference marks, batter boards, etc., set by the Contractor. The Contractor shall correct any errors found in lines, elevations, reference marks, batter boards, etc.. Such a check shall not be construed as approval of the Contractor's work and shall not relieve or diminish the responsibility of the Contractor for the accurate construction and completion of the Work.
- F. Control datum for survey as shown on Drawings.

1.03 QUALITY ASSURANCE

- A. Qualifications
- B. Qualifications
 - 1. Employ a Civil Engineer or Land Surveyor registered within the State of Rhode Island, acceptable to the Engineer.
- C. Certifications
 - 1. Submit certificate signed by the Contractor's Engineer or Land Surveyor stating elevations and locations of the Work are in conformance with the Contract Documents.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

STATE OF RHODE ISLAND AND FEDERAL REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. RHODE ISLAND SALES AND USE TAX
- B. HISTORICAL ARTICLES
- C. PREVAILING MINIMUM WAGE RATES
- D. EXCERPTS FROM RHODE ISLAND LAWS
- E. REQUIREMENTS FOR MINORITY BUSINESS ENTERPRISE, EQUAL OPPORTUNITY, AND NONDISCRIMINATION
- F. ATTACHMENTS

1.02 RHODE ISLAND SALES AND USE TAX

A. Materials and equipment purchased for installation under this Contract are exempt from the Rhode Island Sales Tax. The Contractor shall file for exemption on behalf of the Owner, with the State of Rhode Island Department of Taxation as required by law. The exemption from the Sales Tax shall be taken into account by the Contractor during bidding.

1.03 HISTORICAL ARTICLES

- A. During the life of this Contract, the Contractor is herewith required to immediately notify the following organizations in the event that any articles such as "charcoal," "bone," "shell," "cultural objects fire cracked stones or stone flaking material" or any other such related items of historical significance are discovered.
 - 1. Owner
 - 2. Local Historical Society
 - 3. Rhode Island Historical Commissioner
 - 4. Owner's Representative

1.04 PREVAILING MINIMUM WAGE RATES

- A. Local prevailing minimum wage rates apply to this project. It is the responsibility of the Contractor before bid openings to request, if necessary, any additional information on local prevailing Wage Rates for those tradespeople who are not covered by the applicable local Wage Decision, but who may be employed for the proposed work under this Contract.
- B. The attention of the Contractor is also directed to Specification Subsection 00700,1.19 and APPENDIX A & C of the bid documents in regard to the requirements for certified payrolls. The Contractor shall routinely prepare and submit as a part of the required certified payrolls federal form WH-347 provided under APPENDIX C. Certified payrolls are to be submitted for the Prime Contractor & all sub-contractors.
- C. A schedule of prevailing minimum wage rates, issued for the Work under this Contract, is included APPENDIX A of the bid documents.

1.05 EXCERPTS FROM RHODE ISLAND LAWS

- A. The Contractor and each of his subcontractors shall especially note his obligations to comply with the following statues or excerpts therefrom and any current revisions thereof contained in the General Laws of Rhode Island.
- B. These laws reflect changes made through the end of the 1992 legislative session. While every attempt at accuracy has been made, these are not certified true copies of these laws. The responsibility for compliance with all applicable provisions of Rhode Island laws relating to bidding, award, and performance of public works contracts is the Contractor's. Certified true and complete copies of any Rhode Island laws and regulations may be obtained from the Office of the Rhode Island Secretary of State.

R.I.G.L.

Title, Chapter, Section EXCERPT

5-6-2 WORK FOR WHICH LICENSE REQUIRED

"No person, firm, or corporation shall enter into, engage in, or work at the business of installing wire, conduits, apparatus, fixtures and other appliances for carrying or using electricity for light, heat or other purpose, unless such person, firm or corporation shall have received a license and a certificate therefore, issued by the State Board of Examiners of Electricians."

28-26-6 LICENSE REQUIRED FOR OPERATION OF HOISTING MACHINERY - PUBLIC CONTRACTS

"No persons shall operate or be in direct charge of a hoisting or excavation gasoline, steam, diesel, electric or compressed air hoist, shovel, crane, excavator, of five horsepower or more without obtaining a license to do so as provided in this chapter. No user or agent of use of any such described steam, gasoline, diesel, electric or compressed air hoisting machinery shall permit it to be operated unless it is operated by a duly licensed person as hereinafter provided by this chapter.

Every contract in the construction of public works by the State, or by any City of Town, or by persons contracting therewith for such construction, shall contain a clause embodying the provisions of this section."

Chapter 116

From Chapter 116 of the General Laws of Rhode Island, 1938, relative to the conditions precedent, etc., to carrying on business within this State by foreign corporations:

"The certificate and power of attorney mentioned in the General Corporation Law, properly filled out, subscribed and sworn to, and accompanied by a certified copy of the Charter, articles of association or other similar organization papers, together with all amendments thereto, must be filed in the office of the Secretary of State by all foreign corporations intending to carry on business within this State, or for a foreign corporation to enforce in the courts of this State any contract made within the State."

Detailed information regarding Chapter 116 of the General Laws of Rhode Island, 1938, relative to the conditions precedent, etc., to carrying on business within this State for foreign corporations may be obtained from the Secretary of State, State House, Smith Street, Providence, Rhode Island.

Title 37 (chapters as provided at the end of this Specification Section.)

1.06 REQUIREMENTS FOR MINORITY BUSINESS ENTERPRISE, EQUAL OPPORTUNITY, AND NONDISCRIMINATION

- A. Contracts for work under the bid (proposal) will obligate the contractors and subcontractors not to discriminate in employment practices.
- B. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, handicap, or national origin. The Contractor shall take affirmative action to ensure that applicants are employed and the employees are treated during employment without regard to their race, color, religion, sex, age, handicap, or national origin. Such actions shall include, but not be limited to, the following: employment, upgrading, demotions, or transfers; recruitment or recruitment advertising, selection for training including apprenticeship; and participation in recreational and educational activities. The Contractor agrees to post in conspicuous places available to employees and applicants for employment, notice to be provided, setting forth the provisions of this non-discrimination clause. The Contractor will cause the foregoing provisions to be inserted in all subcontracts for any work covered by this Contract so that such provisions will be binding upon each subcontractor and upon subcontractors for standard commercial supplies or raw materials.
- C. The Contractor shall keep such records and submit such reports concerning the racial and ethnic origin of applicants for employment and employees as the Owner may require as consistent with Federal and State law.
- D. The Contractor agrees to comply with such rules, regulations, or guidelines as the State of Rhode Island may issue to implement these requirements. The Contractor further warrants, that it will comply with, Title VI of the Civil rights Act of 1964, 42 U.S.C. 200d to d4.
- E. Contractors shall comply with the provisions of the General Laws of Rhode Island and attention is called to Title 37, Chapter 13, Section 1-16, relative to the payment of wages, obligations and charges by Contractors on public works projects. Non-resident Contractors are subject to Section 44-1-6 of the RI General Laws, as amended, regarding OUT-OF- STATE CONTRACTORS.
- F. The Contractor will be required to comply with Equal Opportunity Requirements and to abide by the prevailing wage rates for Public Works Projects for all employees on the job. It is the responsibility of contractors to inform themselves as to the local labor conditions, overtime compensation, health and welfare contributions, labor supply and prospective changes or adjustment of wage rates. Information is available at the Department of Labor.
- G. The attention of the Contractor is directed to the fact that this Contract is subject to both Federal and State requirements regarding Minority Business Enterprises (MBE) and Woman's Business Enterprises (WBE) participation. The Contractor hereby agrees to ensure

compliance with all Federal and State MBE/WBE requirements to provide maximum opportunity for such participation.

- H. The Contractor's attention is directed to the following Federal and State requirements contained in APPENDIX B of the bid documents.
- I. The Contractor further agrees to ensure that minority business enterprises as defined in RIGL Section 37-14.1-3, shall have the maximum opportunity to participate in the performance of subcontracts performed under this Contract. The Contractor will take reasonable steps in accordance with regulations promulgated under Chapter 37-14.1 of the RIGL to ensure that minority business enterprises have the maximum opportunity to compete for and perform subcontracts under this Contract. DEPARTMENT OF ADMINISTRATION RI STATE EQUAL OPPORTUNITY OFFICE GENERAL CONTRACT COMPLIANCE CERTIFICATE AND AGREEMENT, Pages 1 through 6, are provided at the end of this Specification.

1.07 ATTACHMENTS

NOT USED

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

REFERENCE STANDARDS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Reference material, abbreviations, and terms used in the Construction Documents and establishes edition dates and complete titles for standards referenced elsewhere in the Specifications.

1.02 QUALITY ASSURANCE

- A. For products or workmanship specified by association, trade, or Federal Standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Obtain copies of standards when required by Contract Documents.
- C. Maintain copy at jobsite during submittals, planning, and progress of the specific work, until Substantial Completion.
- D. Should a conflict exist between references in these Specifications, the State of Rhode Island Department of Transportation (RIDOT) Standard Specifications, 2004 Edition with latest addenda shall prevail. If a RIDOT Standard Specification is not available, the ASTM standard and/or manufacturer's specification shall prevail.
- E. Should specified reference standards conflict with Contract Documents, request clarification from Owner or Owner's Representative before proceeding.
- F. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.03 SCHEDULE OF REFERENCES

AASHTO American Association of State Highway and Transportation Officials

444 North Capitol Street, N.W.

Washington, DC 20001

ACI American Concrete Institute

38800 Country Club Dr.

Farmington Hills, MI 48331-3439

AI Asphalt Institute

2696 Research Park Drive Lexington, KY 40511-8480 AISI American Iron and Steel Institute

25 Massachusetts Drive Washington, DC 20001

ANS American National Standard

ANSI American National Standards Institute

1899 L Street, NW, 11th Floor Washington, DC 20036

API American Petroleum Institute

1220 L Street, NW Washington, DC 20005

ASCE American Society of Civil Engineers

1801 Alexander Bell Drive

Reston, VA 20191

ASME American Society of Mechanical Engineers

Two Park Avenue

New York, NY 10016-5990

ASPA American Sod Producers Association

1855 A Hicks Road

Rolling Meadows. IL 60008

ASTM American Society for Testing and Materials

100 Bar Harbor Drive

PO Box C700

West Conshohocken, PA 19428-2959

AWG American or Brown and Sharpe Wire Gage

AWPA American Wood-Preservers' Association

100 Chase Park South

Birmingham, AL 35244-1851

AWS American Welding Society

CS Commercial Standard

EJCDC Engineers' Joint Contract Document Committee

American Consulting Engineers Council

1015 15th Street, N.W. Washington, DC 20005

Fed Spec. Federal Specification

General Services Administration

Specification and Consumer Information Distribution Section (WFSIS)

Washington Navy Yard, Bldg. 197

Washington, DC 20407

HMA Hot Mix Asphalt

ICBO International Conference of Building Officials

900 Montclair Road

Birmingham, AL 35213-2298

JIC Joint Industry Conference Standards

NBS National Bureau of Standards

NCMA National Concrete Masonry Association

13750 Sunrise Valley Drive

Herndon, VA 20171

NEMA National Electrical Manufacturers' Association

1300 North 17th Street Arlington, VA 22209

PCA Portland Cement Association

5420 Old Orchard Road

Skokie, IL 60077

Stl. WG U.S. Steel Wire Washburn and Moen, American Steel and Wire

or Roebling Gage

UL Underwriters' Laboratories, Inc.

333 Pfingston Road Northbrook, IL 60062

USS Gage United States Standard Gage

125-lb. ANS American National Standard for Cast-Iron Pipe Flanges and Flange

250-lb. ANS Fittings, Designation B16.1-1975, for the appropriate class

1.04 EDITION DATES

BID 2023-395

A. Reference to publications and reference material shall be understood to mean the latest edition, unless stated otherwise.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

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PROJECT MEETINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Administrative and procedural requirements for project meetings.

1.02 PRE-CONSTRUCTION CONFERENCE

- A. The Owner's Representative will schedule and administer a pre-construction conference.
- B. The pre-construction conference will be scheduled and administered within fourteen (14) calendar days after the dated "Notice to Proceed". The Contractor shall be prepared to address such topics as projected construction schedules, major personnel, critical work areas, construction facilities and shop drawing submittals.

1.03 PROGRESS MEETINGS

- A. The Owner or Owner's Representative will schedule and administer progress meetings and specially called meetings throughout the duration of the Work at minimum monthly intervals.
- B. The time and location of such meetings shall be designated by the Owner and shall be convenient for all parties involved.
- C. The Owner or Owner's Representative will prepare agenda with copies for participants, preside at meetings, record minutes, and distribute copies to participants, and those affected by decisions made.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

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SUBMITTALS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Requirements for submission of schedules and shop drawings.

1.02 PROGRESS SCHEDULE

- A. Within fourteen (14) calendar days after execution of the Contract Documents, the Contractor shall submit to the Owner or Owner's Representative for review a construction progress schedule conforming to requirements specified. This schedule should show the proposed dates of commencement and completion of each of the various subdivisions of work required under this Contract and the anticipated monthly percentage of completion based on the total contract price. The Contractor shall be responsible for updating and/or revising this schedule whenever directed by the Owner or Owner's Representative throughout the duration of the Contract.
- B. Special attention is directed to the requirement that the Contractor shall start the Work, as specified under this Contract, no later than thirty (60) calendar days after the execution of the Contract Documents, unless otherwise directed by the Owner. The Contractor shall comply with all pre-construction requirements as specified. The Owner reserves the right to delay the commencement of the Work or any part thereof if the specified requirements as determined by the Owner or Owner's Representative have not been satisfied. The Owner further reserves the right to limit or, delay construction, or certain activities thereof, in certain areas of the Contract should the Owner deem it to be in the public's best interest and/or safety to do so.
- C. The Contractor shall contact the appropriate town or city authorities concerning any public or semi-public events that may occur during the construction period that may affect construction. The Contractor alone shall be responsible for arranging his construction sequence to conform to any restrictions these events may impose. No claims for extras will be allowed because of any delay, extra materials handling, extra excavation, etc. caused by the imposed restrictions. However, additional time may be granted for completion of the work to compensate for delays caused by said restrictions.

1.03 SHOP DRAWINGS

- A. Submit digital PDFs of all shop and working drawings of concrete reinforcement and materials fabricated especially for the Contract, and materials and equipment for which such drawings are specifically requested.
- B. A maximum of two (2) submittals of each shop drawing will be reviewed by the Owner or Owner's Representative. If more submittals are required due to the Contractor's neglect or failure to fulfill the requirements of the Contract plans and specifications, or to make corrections or modifications required by the Owner or Owner's Representative in the review of

the first two submittals, the Owner or Owner's Representative will review the submittal and the Contractor will be responsible for the cost of the review, as determined by the Owner based on the Owner's Representative documentation of time and rates for additional services established in the Agreement between the Owner and the Owner's Representative.

- C. Such drawings shall show the principal dimensions, weight, structural and operating features, space required, clearances, type and/or brand of finish or shop coat, grease fittings, etc., depending on the subject of the drawing. When the dimensions are of particular importance, or when specified, the drawings shall be certified by the manufacturer or fabricator as correct for the Contract.
- D. When so specified or if considered by the Owner or Owner's Representative to be acceptable, manufacturer's specifications, catalog data, descriptive matter, illustrations, etc., may be submitted in place of shop and working drawings.
- E. The Contractor shall be responsible for the prompt and timely submittal of all shop and working drawings to eliminate delay to the Work due to the absence of such drawings. All shop and working drawings must be submitted to the Owner or Owner's Representative within thirty (60) calendar days prior to incorporation into the Work, unless otherwise permitted by the Owner or Owner's Representative. **Prior to the submittal of any shop drawings, the Contractor shall submit a schedule of proposed shop drawing transmittals.** The schedule shall identify the subject matter of each transmittal, the corresponding specification section number and the proposed date of submission. Prior to and during the progress of the Work the schedule shall be revised and resubmitted as requested by the Owner or Owner's Representative.
- F. No material or equipment shall be purchased or fabricated for the Contract until the required shop and working drawings have been submitted as hereinabove provided and reviewed for conformance to the Contract requirements. All such materials and equipment and the work involved in their installation or incorporation into the Work shall then be as shown in and represented by said drawings.
- G. Until the necessary review has been made, the Contractor shall not proceed with any portion of the Work (such as the construction of foundations) for which review is required.
- H. All shop and working drawings shall be submitted to the Owner or Owner's Representative by and/or through the Contractor, who shall be responsible for obtaining shop and working drawings from his subcontractors and returning reviewed drawings to them. All shop and working drawings shall be prepared on standard size, 24-inch by 36-inch sheets, except those which are made by changing existing standard shop and working drawings. All drawings shall be clearly marked with the names of the Owner, Contractor, and building, equipment, or structure to which the drawing applies, and shall be suitable numbered. Submitted shop drawings shall be accompanied by a letter of transmittal, completed by the Contractor as provided by the Owner or Owner's Representative.
- I. Only drawings which have been checked and corrected by the fabricator should be submitted to the Contractor by his subcontractors and vendors. Prior to submitting drawings to the Owner or Owner's Representative, the Contractor shall check thoroughly all such drawings to satisfy himself that the subject matter thereof conforms to the Drawings and Specifications in all respects. All drawings which are correct shall be marked with the date, checker's name, and

indication of the Contractor's approval, and then shall be submitted to the Owner or Owner's Representative; other drawings shall be returned for correction.

- J. If a shop drawing shows any deviation from the Contract requirements, the Contractor shall make specific mention of the deviations in his letter of transmittal.
- K. The review of shop and working drawings by the Owner or Owner's Representative will be general only, and nothing contained in this Section shall relieve, diminish, or alter in any respect the responsibilities of the Contractor under the Contract Documents and in particular, the specific responsibility of the Contractor for details of design and dimensions necessary for proper fitting and construction of the work as required by the Contract and for achieving the result and performance as specified. The Contractor shall be responsible for errors and omissions in shop drawings.
- L. Should the Contractor submit equipment that requires modifications to the structures, piping, electrical conduit, wires, appurtenances, or layouts etc., either existing or as detailed on the Drawings, he shall also submit details of the proposed modifications. If such equipment and modifications are accepted, the Contractor, at no additional cost to the Owner, shall do the work necessary to make such modifications.
- M. The Contractor shall furnish additional copies of shop drawings or catalog cuts when so requested.
- N. Expected submittals include but are not limited to:
 - 1. Compost Filter Tube
 - 2. Tree Protection
 - 3. Ornamental Bench
 - 4. Trash Receptacle
 - 5. Gravel Borrow
 - 6. Crushed Stone
 - 7. Bituminous Asphalt (Wearing/Base Course)
 - 8. Concrete Pavement
 - 9. Polyurethane Playground Surfacing
 - 10. Engineered Wood Fiber Safety Surfacing
 - 11. Playground Equipment
 - 12. Loam
 - 13. Planting Soil
 - 14. Plant Material

PART 2 PRODUCTS

NOT USED

EXECUTION

NOT USED

CONSTRUCTION PROGRESS SCHEDULE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Requirements for computer generated Critical Path Method (CPM) construction scheduling and Narrative progress report.

1.02 SUBMITTALS

- A. Submit in accordance with SECTION 01300-Submittals
 - 1. Quality Assurance/Control Submittal
 - a. Name and version of CPM software proposed for use.
 - b. List of construction projects completed on which progress of work was controlled with CPM software.
 - 2. Schedule
 - a. Within **14 days** following the receipt of the Notice to Proceed, the Contractor shall submit **two** color copies of a computer-generated schedule and a list of activities to the Owner. Following review by the Owner's Representative and Owner the Contractor shall meet with the Owner and/or Owner's Representative to discuss the review. The Contractor shall incorporate the Owner or Owner's Representative's comments into the schedule and submit eight color copies of the revised schedule within 14 days following receipt of the Owner or Owner's Representative's comments.

PART 2 PRODUCTS

2.01 SOFTWARE

A. Computer based scheduling software used by the Contractor shall be the product of a recognized commercial computer software producer and shall be capable of meeting the requirements specified herein.

PART 3 EXECUTION

3.01 PREPARATION

A. General

- 1. The Contractor shall prepare his proposed CPM schedule based on a breakdown of work tasks that he has developed.
- 2. The construction schedule and updates shall be prepared by the Contractor or the Contractor's qualified consultant.

B. Schedule

- 1. Each schedule shall be prefaced with the following summary data:
 - a. Contract name and number
 - b. Contractor's Name
 - c. Contract duration
 - d. The effective or starting date of the schedule
 - e. Revision date of the latest schedule.
- 2. The CPM schedule shall be sequenced by early start date and shall include the following minimum items:
 - a. Activity Name
 - b. Estimated duration
 - c. Activity description
 - d. Early start date (calendar date)
 - e. Early finish date (calendar date)
 - f. Latest allowable start date (calendar date)
 - g. Latest allowable finish date (calendar date)
 - h. Status (whether critical)
 - i. Estimated cost of the activity
 - i. Float (total and free)
 - k. Major milestones
- 3. Separate milestones shall be included for Notice-to-Proceed and Project Completion Date.
- 4. Activities shall include major components of the work including submittals that might impact the critical path, subcontractor work, major and critical equipment design, fabrication, testing, delivery and installation times, system/subsystem/component testing, process and facility startup, training, demobilization, project cleanup and closeout. Critical portions of process instrumentation and control system work, shall be defined in detail in a sub schedule.
- 5. The sum of the costs assigned to the activities shall be equal to the Contract price. Activity costs shall not be assigned to submittals or submittal reviews. Comply with SECTION 01026-Schedule of Values. Provide a table showing the anticipated monthly percentage of completion, based on the total contract price.
- 6. Critical activities, predecessors, free float and total float shall be clearly displayed on the schedule in graphical form. Schedules that contain activities showing negative float or that extend beyond the contract completion date will not be approved.
- 7. Each schedule submittal shall also include a list of activities in the order in which the activities will be performed, along with activity durations, activity predecessors, type of predecessor (finish-start, finish-finish, start-start, lead/lag), and any dependency or required date.
- 8. The schedule shall be based on a standard 5-day work week with allowance for holidays and adverse weather.
- 9. Owner's or Owner's Representative's approval of the CPM schedule is advisory only and shall not relieve the Contractor of responsibility for accomplishing the work prior to the

contract completion date. Omissions and errors in the approved CPM schedule shall not excuse performance less than that required by the Contract. Approval by the Owner or Owner's Representative in no way makes the Owner and/or Owner's Representative an insurer of the CPM schedule's success or liable for time or cost overruns flowing from its shortcomings. The Owner hereby disclaims any obligation or liability by reason of approval by its agent, the Owner or Owner's Representative, of the CPM schedule.

C. Narrative Progress Report

- 1. Include as a minimum:
 - a. Summary of work completed during the previous period (since submission of last narrative progress report).
 - b. Explanation for variations between actual work completed in previous period and planned work as reported in last period.
 - c. Summary of work planned during the next period.
 - d. Current and anticipated delaying factors and their estimated impacts on other activities and milestones, both critical and non-critical.
 - e. Corrective actions taken or proposed.
- 2. A Narrative Progress Report shall be submitted monthly to the Owner or Owner's Representative, at least 5 working days prior to the progress meeting.
- 3. At the discretion of the Owner or Owner's Representative, the Contractor may be required to submit a revised CPM schedule showing completion to date and any changes to the previous schedule.

3.02 MONITORING SCHEDULE

- A. The CPM approved construction schedule shall be used by the Contractor throughout the duration of the project for planning, organizing, and directing the Work, and for reporting progress of the Work
- B. The Contractor is solely responsible for monitoring schedule compliance. When a delay to the critical path occurs, the Contractor shall immediately notify the Owner or Owner's Representative in writing. Within one week of the notification, the Contractor shall submit for the Owner or Owner's Representative's approval, a description of proposed actions to return the project to schedule.

3.03 MODIFYING SCHEDULE

- A. If the Contractor desires to make changes in his method of operating which affect the approved CPM schedule, he shall notify the Owner or Owner's Representative in writing stating what changes are proposed and the reason for the change. If the Owner or Owner's Representative approves these changes, the Contractor shall revise and submit for approval, without additional cost to the Owner, all of the affected portions of the CPM schedule.
- B. It may be necessary for the contract schedule or completion time to be adjusted by the Owner to reflect the effects of job conditions, weather, technical difficulties, strikes, unavoidable delays on the part of the Owner or its representatives and other unforeseeable conditions which may indicate schedule adjustments or completion time extensions. Under such conditions, the Owner or Owner's Representative will direct the Contractor to reschedule the

- work or contract completion time to reflect the changed conditions and the Contractor shall revise his schedule accordingly.
- C. Float time is a project resource available to both the Contractor and the Owner to meet contract milestones and completion dates. Use of float suppression techniques such as preferential sequencing or logic, special lead/lag logic restraints, and extended activity times are prohibited, and use of float time disclosed or implied by use of alternate float suppression techniques shall be shared to proportionate benefit of OWNER and CONTRACTOR.
- D. If the Contractor provides an accepted schedule with an early completion date, the Owner reserves the right to reduce the Time of Completion to match the early completion date by issuing a deductive Change Order at no change in Contract Price.

QUALITY CONTROL

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Requirements for Contractor's quality control of products, suppliers, manufacturers, services, site conditions, and workmanship, to produce Work of specified quality.

1.02 QUALITY ASSURANCE/CONTROL OF INSTALLATION

- A. Comply fully with manufacturers' instructions, including each step in sequence.
- B. Should manufacturers' instructions conflict with Contract Documents, request clarification from Owner or Owner's Representative before proceeding.
- C. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- D. Perform work by persons qualified to produce workmanship of specified quality.
- E. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

1.03 FIELD SAMPLES

- A. Install field samples at the site as required by individual specifications sections for review.
- B. Acceptable samples represent a quality level for the Work.
- C. Where field sample is specified to be removed, clear area only after field sample has been accepted by the Owner or Owner's Representative.

1.04 CERTIFIED WELDERS

- A. Structural welds shall be made only by operators who have been qualified by tests, as prescribed in the "Standard Qualification Procedure" of the American Welders Society, to perform the type of work required.
- B. Pipe welds shall be made only by operators who have been qualified by the National Certified Pipe Welding Bureau and each operator's qualification record shall be submitted to the Owner or Owner's Representative before any work is performed.
- C. Shop welding shall be in accordance with the "Code for Welding in Building Construction".

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

TESTING LABORATORY SERVICES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes

- 1. Qualification, duties, and responsibilities of testing laboratories.
- 2. Coordination and scheduling responsibilities of the Contractor.

B. Related Sections

- 1. Section 01020 Allowances
- 2. Section 01600 Materials and Equipment

1.02 PAYMENT PROCEDURES

A. Initial Testing

1. The Owner will pay for initial testing services required by the Owner's Representative, unless noted otherwise. Allowance No. 1 shall be used for initial testing services, see Section 00300 BID.

B. Retesting

1. When initial tests indicate noncompliance with the Contract Documents, subsequent retesting occasioned by the noncompliance shall be performed by the same testing agency, and costs thereof will be deducted by the Owner from the Contract Sum.

C. Contractors Convenience Testing

1. Inspecting and testing performed exclusively for the Contractor's convenience shall be the sole responsibility of the Contractor.

1.03 REFERENCES

A. American Society for Testing and Materials (ASTM)

1. E329, Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection

1.04 REQUIREMENTS

A. Work included:

- 1. Cooperate with the Owner's selected testing agency and all others responsible or testing and inspecting the Work.
- 2. Provide other testing and inspecting as specified to be furnished by the Contractor in this Section and/or elsewhere in the Contract Documents.
- 3. Where no testing requirements are described, but the Owner directs testing, the Contractor shall provide testing under the requirements of this Specification.

B. Work not included:

1. Selection of testing laboratory: The Owner will select a qualified independent testing laboratory.

1.05 QUALITY ASSURANCE

A. Qualifications

1. The testing laboratory will be qualified to the Owner's approval in accordance with ASTM E329.

B. Regulatory requirements

- 1. Testing, when required, will be in accordance with all pertinent codes and regulations and with selected standards of the American Society for Testing and Materials.
- 2. Regulatory Requirements Inspections and tests required by codes or ordinances, or by a plan approved authority, and which are made by a legally constituted authority, shall be the responsibility of and shall be paid for by the Contractor, unless otherwise provided in the Contract Documents.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Comply with pertinent provisions of Section 01600 Materials and Equipment.
- B. Promptly process and distribute, to the Owner's Representative, required copies of test reports and instructions to assure necessary retesting and replacement of materials with the least possible delay in progress of the Work.

1.07 SCHEDULING

A. Establishing schedule

- 1. By advance discussion with the testing laboratory selected by the Owner, determine the time required for the laboratory to perform its tests and to issue each of its findings.
- 2. Provide all required time within the construction schedule.
- 3. Coordinate testing activity with the appropriate testing laboratory.

B. Revising schedule

1. When changes of construction schedule are necessary during construction, coordinate all such changes with the testing laboratory as required.

C. Adherence to schedule

1. When the testing laboratory is ready to test according to the established schedule, but is prevented from testing or taking specimens due to incompleteness of the Work, all extra charges for testing attributable to the delay may be back-charged to the Contractor and shall not be borne by the Owner.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

3.01 FIELD QUALITY CONTROL

A. Site Tests

- 1. Representatives of the testing laboratory shall have access to the Work at all times and at all locations where the Work is in progress. Provide facilities for such access to enable the laboratory to perform its functions properly.
- 2. All specimens and samples for testing, unless otherwise provided in the Contract Documents, shall be taken by the testing personnel. All sampling equipment and personnel will be provided by the testing laboratory. All deliveries of specimens and samples to the testing laboratory will be performed by the testing laboratory.

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TEMPORARY CONTROLS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Requirements for cleaning, maintenance of the site, barriers and fences required during construction.

1.02 CLEANING DURING CONSTRUCTION

- A. Unless otherwise specified under the various trade Sections of the Specifications, the General Contractor shall perform clean-up operations during construction as herein specified.
 - 1. Control accumulation of waste materials and rubbish; periodically dispose of off-site. Bear all costs, including fees resulting from disposal.
 - 2. Clean interior areas prior to start finish work and maintain areas free of dust and other contaminants during finishing operations.
 - 3. Maintain project in accordance with all local, State and Federal Regulatory Requirements.
 - 4. Store volatile wastes in covered metal containers and remove from premises.
 - 5. Prevent accumulation of wastes that create hazardous conditions.
 - 6. Provide adequate ventilation during use of volatile or noxious substances.
- B. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
 - 1. Do not burn or bury rubbish and waste materials on site.
 - 2. Do not dispose or volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains.
 - 3. Do not dispose of wastes into streams or waterways.
 - 4. Use only those materials which will not create hazards to health or property, and which will not damage surfaces.
 - 5. Use only those cleaning materials and methods recommended by manufacturer of surface material to be cleaned.
 - 6. Execute cleaning to ensure that the buildings, the sites, and adjacent properties are maintained free from accumulations of waste materials and rubbish and wind-blown debris, resulting from construction operations.
 - 7. Provide on-site containers for collection of waste materials, debris, and rubbish.
 - 8. Remove waste materials, debris, and rubbish from the site periodically and dispose of at legal disposal areas off the construction site.
 - 9. Handle material in a controlled manner with as little handling as possible. Do not drop or throw materials from heights.
 - 10. Schedule cleaning operations so that dust and other contaminants resulting from cleaning process will not damage surrounding surfaces.
 - 11. During its progress, the work and the adjacent areas affected thereby shall be kept cleaned up and all rubbish, surplus materials, and unneeded construction equipment shall

- be removed, and all damage repaired so that the public and property owners will be inconvenienced as little as possible.
- 12. Where material or debris has washed or flowed into or been placed in existing watercourses, ditches, gutters, drains, pipes, structures, work done under this contract, or elsewhere during the Contractor's operations, such material or debris shall be entirely removed and satisfactorily disposed of during the progress of the work, and the ditches, channels, drains, pipes, structures, and work, etc. shall, upon completion of the work, be left in a clean and neat condition.

1.03 DUST CONTROL

- A. Provide adequate means for the purpose of preventing dust caused by construction operations throughout the period of the construction contract.
- B. This provision does not supersede any specific requirements for methods of construction or applicable general conditions or performance obligations of the General Contractor.

1.04 EROSION AND SEDIMENT CONTROL

- A. Plan and execute construction by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
- B. Minimize amount of bare soil exposed at one time.
- C. Provide temporary measures such as berms, dikes, and drains, to prevent water flow.
- D. Construct fill and waste areas by selective placement to avoid erosive surface silts for clays.
- E. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.
- F. Construct sediment control devices for discharge from dewatering trenches.
- G. Construct all sedimentation control devices shown on the plans.

1.05 NOISE CONTROL

- A. Develop and maintain a noise-abatement program and enforce strict discipline over all personnel to keep noise to a minimum.
- B. Execute construction work by methods and by use of equipment which will reduce excess noise.
 - 1. Equip air compressors with Silencers, and power equipment with mufflers.
 - 2. Manage vehicular traffic and scheduling to reduce noise.

1.06 POLLUTION CONTROL

A. Special care shall be taken to prevent contamination or muddying up or interfering in any way with the stream flows, if any along the line of work. No waste matter of any kind will be

allowed to discharge into the stream flows or impounded water of any pools or other bodies of water.

1.07 SURFACE WATER CONTROL

- A. Take all precautions to prevent damage to the work or equipment by high waters or by storms. The Owner's Representative with the approval of the Owner may prohibit the carrying out of any work at any time when in his judgment, high water or storm conditions are unfavorable or not suitable, or at any time, regardless of the weather, when proper precautions are not being taken to safeguard previously constructed work or work in progress.
- B. In case of damage caused by the failure of the Contractor to take adequate precautions, the Contractor shall repair or replace equipment damaged and shall make such repairs or rebuild such parts of the damaged work, as the Owner's Representative may require, at no additional expense to the Owner.

1.08 BARRIERS AND ENCLOSURES

A. Fences and Barricades

- 1. Provide and maintain temporary fences, barriers, lights, guardrails, and barricades as indicated in the Contract Documents, or as necessary to secure the Work and adjacent property and protect persons and property.
- 2. Obtain necessary approvals and permits and provide temporary expedients as necessary to accommodate tasks requiring items mentioned herein.

B. Protection of Trees

- 1. The Contractor shall take care not to harm trees along the sides of roads or with in the existing facility in which the construction work is to be done or trees on adjacent lands except as indicated on the drawings or with the written permission of the Owner and any other owner of the trees involved. Care shall be taken not to cut tree roots so as to harm the growth of trees to remain.
- 2. If, in the opinion of the Owner's Representative, any trees damaged during construction can be repaired, the Contractor shall satisfactorily repair same at no further cost to the Owner
- 3. If, in the opinion of the Owner's Representative, any tree damaged during construction cannot be repaired and should be removed, the Contractor shall satisfactorily remove and replace, in kind, same at no further cost to the Owner.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

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PROJECT SIGNS

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes
 - 1. Requirements for fabricating and erecting Project signs
- B. Related Sections
 - 1. Section 01067 State of Rhode Island and Federal Requirements

1.02 SEQUENCING

A. Signage to be in place prior to start of construction.

1.03 SUBMITTALS

- A. Shop drawing shall be submitted for the Project Sign for approval by Owner before the manufacturing shall begin. The owner is allowed one set of changes and a second review for sign-off.
 - 1. Design vendor will provide "Final Draft" text, typestyles, graphic elements, and layout for the park entrance sign.
- B. Shop Drawings: Show fabrication and installation details for signs.
 - 1. Show sign mounting heights, locations of supplementary supports to be provided by others, and accessories.
 - 2. Include fabrication and installation details and attachments to other work.
 - 3. Owner is allowed changes to the sign fabrication drawings during the submittal process. This includes a second proof of the entire drawing package at no additional charge.

PART 2 PRODUCTS

2.01 PROJECT SIGN

- A. Contractor shall furnish, install and maintain one (1) 4' x 8' single sided project sign. This sign shall be installed within seven (7) calendar days of the date of commencement in location to be selected by the Owner or Owner's Representative.
- B. Project sign shall be constructed out of a single sheet of 4' x 8' x 1/2" MDF, all sides painted white, with a single sheet of vinyl graphics applied to the board.

- C. Secure sign to three 4" x 4" x 12' pressure-treated wood posts with tamper resistant fasteners. Locate as directed by Owner or Owner's representative and install no later than 7 days following notice to proceed.
- D. Digital copy of the City Seal, U.S. Housing & Urban Development Seal and Rhode Island DEM Seal to be provided by Owner's Representative in .JPG or similar high resolution digital format.
- E. Metal Fasteners and Screws All metal fasteners shall be heavy-duty stainless steel. All fasteners shall be tamper-resistant type fasteners. Provide shop drawings and / or samples of method of attachment of Project Sign.
- F. Sign Graphic
 - 1. Shall be supplied by the Owner.

PART 3 EXECUTION

3.01 INSTALLATION

A.

- 1. Fabricate, construct and install sign as indicated, using mounting methods and of types described and complying with applicable manufacturer's written instructions.
- 2. Install signs level, plumb, and at heights indicated, keep sign surfaces free of distortion and other defects in appearance.

MATERIALS AND EQUIPMENT

PART 1 GENERAL

2.01 SUMMARY

A. Section Includes

1. Requirements for delivery, storage, handling and installation of systems, materials, manufactured units, equipment, components, and accessories used in the Work.

B. Related Sections

1. Section 01300 - Submittals

2.02 DELIVERY

- A. Refer to Specifications' Sections for requirements pertaining to delivery and handling of materials and equipment.
- B. Transport products by methods to avoid product damage; deliver in undamaged condition in manufacturers' unopened containers or packaging, dry.
- C. Provide equipment and personnel to handle products by methods to prevent soiling or damage.
- D. Promptly inspect shipments to assure that products comply with requirements, that quantities are correct, and products are undamaged.

2.03 STORAGE AND PROTECTION

- A. Refer to Specifications' Sections for requirements pertaining to storage and protection of materials and equipment.
- B. Store products in accordance with manufacturers' instruction, with seals and labels intact and legible. Store sensitive products in weather tight enclosures; maintain within temperature and humidity ranges required by manufacturers' instructions.
- C. For exterior storage of fabricated products, place on sloped supports above ground. Cover products subject to deterioration with impervious sheet covering; provide ventilation to avoid condensation.
- D. Store loose granular materials on solid surfaces in a well-drained area; prevent mixing with foreign matter.
- E. Arrange storage to provide access for inspection. Periodically inspect to assure that products are undamaged and are maintained under required conditions.

2.04 INSTALLATION STANDARDS

- A. Comply with Specifications and referenced standards as minimum requirements.
- B. Components required to be supplied in quantity within a Specification Section shall be the same and shall be interchangeable.
- C. Do not use materials and equipment removed from existing structures, except as specifically required, or allowed, by the Contract Documents.
- D. Perform work by persons qualified to produce workmanship of specified quality.
- E. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, and racking.
- F. When work is specified to comply with manufacturers' instructions, submit copies as specified in Section 01300 Submittals, distribute copies to persons involved, and maintain one set in field office.
- G. Perform work in accordance with details of instructions and specified requirements.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

CONTRACT CLOSE-OUT

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Requirements for specific administrative procedures, record keeping, close-out submittals, and forms used at substantial and final completion of the Work.
- B. Contractor shall satisfy all administrative requirements within the Contract Documents and the Requirements listed in this section prior to Contract Close-out.

1.02 FINAL CLEANING

- A. On or before the completion of the work, the Contractor shall, unless otherwise especially directed or permitted in writing, tear down and remove all temporary buildings and structures built by him; shall remove all temporary works, tools, and machinery or other construction equipment furnished by him; shall remove all rubbish from any grounds which he has occupied; and shall leave the roads and all parts of the premises and adjacent property affected by his operations in a neat and satisfactory condition.
- B. The Contractor shall restore or replace, when and as directed, any public or private property damage by his work, equipment, or employees, to a condition at least equal to that existing immediately prior to the beginning of operations. To this end, the Contractor shall do as required, all necessary highway or driveway, walk and landscaping work. Suitable materials, equipment, and methods shall be used for such restoration. The restoration of existing property or structures shall be done as promptly as practicable as work progresses and shall not be left until the end of the contract period.
- C. Unless otherwise specified under the various Sections of the Specifications, the Contract or shall perform final cleaning operations as herein specified prior to final inspection.
- D. At completion of work, remove waste materials, rubbish tools, equipment, machinery and surplus materials, and clean all sight-exposed surfaces; leave project clean and ready for occupancy.
- E. Cleaning shall include all surfaces, interior and exterior in which the Contractor and all Subcontractors have had access whether existing or new.
- F. Refer to Sections of the Specifications for cleaning of specific products or work.
- G. Use only those materials which will not create hazards to health or property and which will not damage surfaces.
- H. Use only those cleaning materials and methods that are recommended by the manufacturer of surfaces material to be cleaned.

I. Employ experienced workmen, or professional cleaners, for final cleaning operations.

1.03 PROJECT RECORD DOCUMENTS

- A. Project Record Documents also referred here as Record Drawings shall consist of all the contract drawings.
- B. The Contractor and all Subcontractors shall be required to maintain one set of Record Drawings, as the work relates to their Sections of the Specifications, at the site.
- C. Record Drawings shall be stored and maintained by the General Contractor. The Record Drawings shall be maintained in a clean, dry, and legible condition and shall not be used for construction purposes.
- D. Record Drawings shall be available at all time for inspection by the Owner. All deficiencies noted shall be promptly corrected.
- E. The following information shall be indicated on the Record Drawings for building construction:
 - 1. Record all changes, including change orders, in the location, size, number, and type both horizontally and vertically of all elements of the projects which deviate from those indicated on all the contract drawings.
 - 2. The tolerance for the actual location of utilities and appurtenances within the building to be marked on the Record Drawings shall be plus or minus two (2) inches.
 - 3. The location of all underground utilities and appurtenances referenced to permanent surface improvements, both horizontally and vertically at ten (10) ft. intervals and at all changes of direction.
 - 4. The location of all internal utilities and appurtenances, concealed by finish materials, including but not limited to valves, coils, dampers, vents, clean outs, strainers, pipes, junction boxes, turning vanes, variable and constant volume boxes, ducts, traps and maintenance devices. The location of these internal utilities, appurtenances and devices shall be shown by offsets to the column grid lines on the drawings.
 - 5. Each of the utilities and appurtenances shall be referenced by showing a tag number, area served and function on the Record Drawings.
 - 6. Prior to the installation of all finish materials, a review of the Record Drawings shall be made to confirm that all changes have been recorded. All costs to investigate such conditions shall be borne by the applicable party as demonstrated by the Engineer.
- F. At the end of each month and before payment for materials installed, the Contractor, and his Subcontractors, shall review Record Drawings for purpose of payment. If the changes in location of all installed elements are not shown on the Record Drawings and verified in the field, then the material shall not be considered as installed and payment will be withheld.
- G. At the completion of the contract, each Subcontractor shall submit to the Contractor a complete set of his respective Record Drawings indicating all changes. After checking the above drawings, the Contractor shall certify in writing on the title sheet of the drawings that they are complete and correct and shall submit the Record Drawings to the Engineer.

1.04 WARRANTIES

A. Comply with requirements of Section 01740 Warranties.

1.05 FINAL INSPECTION

- A. The Contractor shall submit written certification that:
 - 1. Project has been inspected for compliance with Contract Documents.
 - 2. Equipment and systems have been tested in the presence of the manufacturer's representative and are operational and satisfactory.
 - 3. Project is completed, and ready for final inspection.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

WARRANTIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. General administrative and procedural requirements for warranties required by the Contract Documents, including manufacturers standard warranties on products and special warranties.

1.02 SUBMITTALS

- A. Submit written warranties to the Owner prior to the date fixed for Substantial Completion. If the Certificate of Substantial Completion designates a commencement date for warranties other than a date of Substantial Completion for the Work, or a designed portion of the Work, submit written warranties upon request of the Owner.
- B. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Owner prior to acceptance of this portion of the Work.
- C. Refer to individual Sections for specific content requirements, and particular requirements for submittal of special warranties.

1.03 WARRANTY REQUIREMENT

- A. Related Damages and Losses: 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 correction of warranted Work.
- B. Reinstatement of Warranty: 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.
- C. Replacement Cost: 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 has benefited from use of the Work through a portion of its anticipated useful service life.
- D. Owner's Recourse: 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, or remedies.
- E. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the contract Documents.

F. Disclaimers and Limitations: 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.

1.04 DEFINITIONS

- A. Standard Product Warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the Owner.
- B. Special Warranties are written warranties 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.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

MAINTENANCE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Procedures for maintaining work completed under this Contract.

1.02 MAINTENANCE PERIOD

- A. The general maintenance period for all construction or materials under this Contract shall be one (1) year subsequent to the date of the acceptance of the work by the Owner, or as provided by other sections of this Specification.
- B. If the Owner puts any structure or equipment to use prior to acceptance of all work under the Contract, the maintenance period for such structures or equipment shall be calculated from the time use begins.
- C. Contractor agrees to replace the material which does not conform to the Contract requirements, and to repair any damage of material or work without cost to the Owner, to satisfaction of Owner, in conformance with Contract Documents provided orders for replacement and/or repairs are received in writing by the Contractor within the one year period.
- D. This Section shall in no way limit the duration of the Contractor's responsibility for the correction of any defect due to workmanship or materials provided by the Contractor which are not in compliance with the Contract Documents.

1.03 ABUSE OF WORK

A. Contractor is not obligated to perform work of replacement or repair that they may prove is required because of abuse by parties other than the Contractor, after the date the Owner puts to continuous use the work requiring replacements or repair, or after date the Owner has approved the Certificate of Completion.

1.04 EMERGENCY REPAIRS

- A. If the Owner deems necessary, the Owner shall order replacement or repairs be undertaken within 24 hours.
- B. If the Contractor delays or fails to make the ordered replacement or repairs within the time specified, the Owner shall have the right to make such replacements or repairs and the expense shall be deducted from moneys due the Contractor, or moneys of the Contractor retained by the Owner.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

DEMOLITION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Requirements for demolition of existing facilities and removal of equipment and materials for reuse or salvage.

1.02 SUBMITTALS

- A. Shop Drawings
 - 1. In accordance with Specification SECTION 01300 1.03 Shop Drawings.
 - 2. Schedule of demolition included in and consistent with requirements of Specification SECTION 01300 1.02 Progress Schedules and SECTION 01310 Construction Progress Schedule.
- B. Quality Assurance/Control Submittals
 - 1. Methods of demolition and equipment proposed for use in demolition
 - 2. Copies of Permits required for demolition.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

3.01 PREPARATION

- A. Equipment Salvage and Reuse
 - 1. Do not remove equipment or materials without approval of Owner.
 - 2. Properly store and maintain equipment and materials to be reused in the Work.

3.02 SEQUENCE

A. Sequence for demolition and site preparation shall be coordinated during the Pre-Construction Meeting.

3.03 SAFETY

A. Protect persons and property throughout progress of work.

- B. Burning of demolition debris not permitted on or near site.
- C. Explosives not to be used or brought to site without prior written permission by Engineer.
- D. Provide and maintain temporary passageways for safe access within area of demolition operation.
- E. Take precautions to minimize spread of dust and flying particles. Keep work area wet down to prevent dust from rising.
- F. Provide maximum practical protection from inclement weather to materials, equipment, and personnel in partially dismantled structures.

3.04 DEMOLITION

- A. Confine demolition work, new construction and operations to areas that will not interfere with continued use and operation of entire site.
- B. On exposed surfaces, where there will be in the finish work a joint between old and new concrete, the existing concrete at the face shall be removed to a straight rather than a rough line.

3.05 REPAIR/RESTORATION

A. The Contractor shall exercise extreme caution when removing existing play structures and equipment walls that are to be utilized as part of the new construction. Over-excavated areas and material shall be replaced at the Contractor's expense and to the satisfaction of the Owner. Any damage to the existing bituminous concrete (HMA), play structures, or site amenities caused by the Contractor's operations shall be satisfactorily repaired at the Contractor's expense.

3.06 DISPOSAL

A. All mechanical equipment, including interior piping, valves and other appurtenances indicated on the drawings or specified and directed by Owner to be demolished or removed will be removed from the property of the Owner immediately after disassembly and will become the property of the Contractor. The Owner reserves the right to remove any equipment or piping prior to signing of the agreement.

B. Debris from structures, including concrete, masonry, steel or other rubble shall become the property of the Contractor, unless otherwise directed by the Owner, and shall be promptly removed from site at the Contractor's expense.

3.07 CLEANING

A. Leave affected areas of demolition in a clean, safe and orderly condition, ready to accept new work if proposed.

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SITE PREPARATION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Requirements for removal of vegetation, topsoil and amenities at the site.

1.02 DEFINITIONS

- A. Clearing: Removal of trash, vegetation, or organic matter alive or dead.
- B. Grubbing: Removal of vegetation including stumps, buried logs and roots.
- C. Scalping: Removal of grass turf to a depth of 3 inches.
- D. Stripping: Removal of topsoil after scalping operation is complete.

1.03 QUALITY ASSURANCE

A. Obtain Owner or Owner's Representative's approval of staked work limits prior to starting the clearing, grubbing, and stripping.

1.04 PROJECT/SITE CONDITIONS

- A. Environmental Requirements
 - A. Install erosion and sediment controls prior to starting the Work.
- B. Existing Conditions
 - A. Temporarily remove property improvements, to the minimum extent necessary, to complete the work and restore improvements to condition which existed prior to construction.
 - B. Prior to the start of construction, coordinate construction access with Owner and/or Owner's representative. Site shall be accessed to the north from Pleasant Street, as shown in the Drawings.

PART 2 PRODUCTS

2.01 EXISTING PRODUCTS

A. Chips from cleared trees and brush.

2.02 COMPOST FILTER TUBE

- A. Compost Filter Tube size shall be 12" diameter and conform to the plans and details.
- B. Filter Tube 'sock' shall be bio-degradable, tubular, knitted mesh containing the media.
- C. The compost media shall be approximately 70% partially decomposed wood chips.
- D. The compost media shall be approximately 30% weed-free compost.
- A. 100% of the media shall pass 2" sieve, with 30% passing 3/8" sieve.

2.03 CATCH BASIN SEDIMENT CONTROL DEVICE - SILT SACK

- A. The silt sack for catch basin sediment control shall be manufactured of ultra-violet light stable, durable woven polypropylene fabric.
- B. The erosion control shall be designed to collect sediment and debris while allowing water to pass through and enter the storm drainage system. The fabric shall be rated for a minimum flow rate of 150 gpm.

PART 3 EXECUTION

3.01 PROTECTION

- A. Do not cut or injure any trees or other vegetation outside the limits of disturbance, as indicated on the drawings.
- B. Trees, shrubbery, or planting shall not be removed except with the written approval of the Owner or Owner's Representative.
- C. Preserve certain vegetation such as trees, shrubs, hedges, and plants within the construction area, as indicated on the drawings to be protected.

D. Work In Improved Property

- A. Protect trees, cultivated hedges, lawns, shrubs, and plants that might be damaged by the Contractor's operations.
- B. Temporarily replant and care for trees less than 4 inches in diameter that would be damaged by the construction operation. After the construction operations have been substantially completed, replant in their original positions and care for until growth is reestablished. If trees, cultivated hedges, lawns, shrubs, and plants are injured to such a degree as to affect their growth or diminish their beauty or usefulness, they shall be replaced at the Contractor's expense by items of kind and quality existing at the start of the work.
- C. Do such handwork as may be required to prevent damage to buildings and improvements.

D. Protect fences and stone walls and if needed to be removed to facilitate construction or if damaged, upon completion of the work, properly restore or repair to at least as good condition as existed prior to start of the work.

3.02 CLEARING

- A. Cut or remove all trees, saplings, brush, and vines, windfalls, logs, and trees lying on the ground, dead trees, and stumps more than 1 foot high above the ground surface.
- B. Except where clearing is done by uprooting with machinery or where stumps are left longer to facilitate subsequent grubbing operations, trees, stumps, and the stubs to be cleared shall be cut as close to the ground surface as practicable, but no more than 6-inches above the ground surface in the case of small trees, and 12-inches in the case of larger trees. Saplings, brush, and vines shall be cut off close to the ground.

C. Selective Trimming

- A. Cut back limbs and branches of trees to be preserved only to the extent necessary for construction.
- B. Trim neatly, and cleanly so that the remaining tree will not be damaged, and healing will be facilitated. Where limbs and branches over 1 inch in diameter have been cut, the newly cut area of the tree shall be given a thorough application of approved tree-healing paint.

D. Salvaged Wood

- A. Logs, timber and other wood removed in the course of clearing found to be acceptable, as determined solely by the Owner or Owner's Representative, shall remain the property of the applicable private property owner or the Owner, unless otherwise directed by the Owner or Owner's Representative.
- B. Cut logs, timber and other wood in 4-foot lengths and stack, as directed by the Owner or Owner's Representative.
- C. Prior to the final completion of the contract, all unclaimed logs, timber, and other wood previously cut and stacked shall be removed from the site and properly disposed of by the Contractor at no additional cost to the Owner.

E. Chips from Cleared Wood and Brush

- A. Stockpile for future use on cleared easements as indicated on the Drawings.
- B. Spread at locations shown on the drawings once work is substantially complete.
- C. If the wood chips from the cleared wood are not of sufficient amount, the Contractor at his own expense shall furnish the required amount to provide a minimum thickness as shown on the Contract Drawings.
- D. Elm wood and elm bark shall not be used as chips for ground cover.

3.03 GRUBBING

A. Remove completely all stumps.

- B. Remove to a depth of 12-inches all roots larger than 3-inches in diameter.
- C. Remove to a depth of 6-inches all roots larger than 1/2-inches in diameter.
- D. Measure depths from the existing ground surface or the proposed finished grade, whichever is the lower.

3.04 STRIPPING

- A. Strip topsoil, loam, and unsuitable earth from the ground surface in areas cleared and grubbed.
- B. Topsoil shall be stockpiled on site for re-use. No topsoil or loam shall be exported off-site.
- C. Utilize topsoil and loam, where possible, for finished surfacing.
- D. Dispose of unsuitable materials off site at authorized disposal location.

3.05 DISPOSAL OF CLEARED AND GRUBBED MATERIALS

- A. Dispose of cleared and grubbed materials off site at authorized disposal location.
- B. Such disposal shall be carried on as promptly as possible after removal of material in the clearing and grubbing operations and shall not be left until the final period of cleaning up.
- C. Elm bark whether stripped from the wood or intact with the wood shall be either buried at least 1 ft. below grade in approved dumping areas or burned in a suitable incinerator off-site with satisfactory anti pollution and fire prevention controls to prevent the spread of Dutch Elm Disease.

3.06 PLAY EQUIPMENT AND SITE AMENITIES

- A. Existing Play Equipment: Remove and dispose of existing playground equipment per the drawings and these Specifications. Coordinate all items noted as remove and dispose or remove and relocate on the plans with the Owner or Owner's Representative.
- B. Existing Site Amenities: Remove and dispose, salvage or reset existing site amenities including but not limited to benches, foundations, posts and boulders per the drawings and these Specifications. Coordinate all items as remove and dispose or stockpile on the plans with the Owner or Owner's Representative. Contractor responsible for identifying any additional amenities not identified on the plans and coordinating with Owner prior to disturbing.
- C. Existing Boulders: Existing boulders shall be removed and stockpiled for reuse. Contractor is responsible for stockpiling boulders on site until ready for install. Boulders shall be cleaned to remove any dirt, debris, or stains prior to installation.

TREE PROTECTION

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes

1. Requirements for furnishing and placing standardized snow fencing or construction fencing for tree protection, at locations shown as indicated on the Plans or as directed by the Owner or Owner's Representative, all in accordance with these Specifications.

1.02 REFERENCES

A. State of Rhode Island Department of Transportation (RIDOT) Standard Specifications, 2004 Edition with latest addenda.

1.03 SUBMITTALS

A. Shop Drawings

1. Provide Material Specifications and Manufacturer's Data Sheets.

1.04 QUALITY ASSURANCE

A. Field Samples

 The attention of the Contractor is directed to the fact that all materials furnished by the Contractor to be incorporated into the Work shall be subject to the inspection of the Owner or Owner's Representative. The Owner or Owner's Representative shall be the sole judge as to the acceptability of proposed materials and said judgement shall be final, conclusive, and binding.

PART 2 PRODUCTS

2.01 MATERIALS

A. DRIP-LINE TREE PROTECTION

- 1. Shall be in accordance with the State of Rhode Island Department of Transportation (RIDOT) Standard Specifications, 2004 Edition with latest addenda.
- 2. Shall be standardized snow fencing or construction fencing and standard steel posts a minimum of 8 feet in length.
- 3. Owner's Representative may elect to sample material supplied at the source.

PART 3 EXECUTION

3.01 INSTALLATION

A. Drip-Line Tree Protection

1. The Tree Protection shall be placed around the tree in a circumferential manner as indicated on the Plans. It securely erected and be vertically plumb. The Tree Protection shall not be secured to the tree in any manner. At no time shall restraining lines be secured to the tree or to surrounding vegetative growth. The Tree Protection shall be removed when all mechanical work within the project areas has been completed and approved. Removal of the fence shall be approved by the Owner or Owner's Representative.

SECTION 02200

EARTH EXCAVATION, BACKFILL, FILL AND GRADING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes

1. Requirements for; excavating in earth for trenches and structures; backfilling excavations; furnishing necessary material; compaction; constructing embankments and fills; miscellaneous earth excavations and miscellaneous grading.

B. Related Sections

- 1. Section 01410 Testing Laboratory Services
- 2. Section 02215 Aggregate Materials
- 3. Section 03300 Cast-In-Place Concrete

1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM).
 - 1. D1557, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³ (2,700 kN-m/m³)).

1.03 QUALITY ASSURANCE

A. Field Samples

1. Provide samples of materials as requested by the Owner or Owner's Representative, to the Quality Control Owner or Owner's Representative hired by the Owner, prior to delivery of materials on site, in order to facilitate field testing of compaction operations and material properties.

1.04 PROJECT/SITE CONDITIONS

A. Existing Conditions

1. There may be pipes, drains, and other utilities in locations not indicated on drawings, no attempt has been made to show all services, and completeness or accuracy of information given is not guaranteed.

1.05 MAINTENANCE

A. Maintain all work in accordance with SECTION 01800.

PART 2 PRODUCTS

2.01 MATERIALS

A. Suitable Aggregate

- 1. The nature of materials will govern both acceptability for backfill and methods best suited for placement and compaction.
- 2. All material whether from excavations or from borrow pits, after being placed and properly compact, will make a dense stable fill and containing no vegetation, masses of roots, individual roots more than 18 inches long, or more than 1/2 inch in diameter, stones over 6 inches in diameter, or porous matter.
- 3. Organic matter to be well distributed and not to exceed minor quantities.

B. Trench and Excavation Backfill

In general, and unless other material is indicated on drawings or specified, material used
for backfilling trenches and excavations shall be suitable material which was removed in
the course of making the construction excavations. If sufficient suitable material is not
available from the excavations, the backfill material shall be crushed stone, gravel borrow
or select borrow as directed by the Owner or Owner's Representative, in according to
respective Specification Sections.

C. Structure Backfill

Unless otherwise indicated or specified, all fill and backfill under structures and pavement
adjacent to structures shall be compacted gravel borrow containing not more than 10
percent material passing a 200 sieve. When coarse aggregate and fine aggregate are
indicated or specified for use under structures, they shall conform to the requirements for
coarse and fine aggregate specified in SECTION 03300.

D. Filling and Embankment Backfill

1. Suitable selected materials available from the excavations and not required for backfill around pipes or against structures may be used for filling and building embankments, except as otherwise specified. Material needed in addition to that available from construction operations shall be obtained from suitable gravel banks or other suitable deposits. The Contractor shall furnish, at his own expense, all borrow material needed on the work.

E. Additional materials

- 1. Concrete: In accordance with SECTION 03300.
- 2. Crushed stone: In accordance with SECTION 02215.
- 3. Gravel borrow: In accordance with SECTION 02215.
- 4. Select borrow: In accordance with SECTION 02215.

2.02 EQUIPMENT

A. Well Points

1. Designed to drain soil and prevent saturated soil from flowing into excavation.

B. Pumping Units

1. Designed for use with the wellpoints, capable of maintaining a high vacuum and, handling large volumes of air and water at the same time.

C. Underdrain Pipe

- 1. HDPE pipe enclosed in crushed stone encased in filter fabric.
- 2. Sewer pipe of quality know as "seconds".

2.03 SOURCE QUALITY CONTROL

A. Provide Owner or Owner's Representative with access to location of off site sources of materials.

PART 3 EXECUTION

3.01 EXAMINATION

A. Contractor shall verify all existing utilities and facilities prior to excavation.

3.02 PROTECTION

A. Utilities

- 1. Support and protect from damage existing pipes, poles, wires, fences, curbing, property line markers, and other structures, which the Owner or Owner's Representative decides must be preserved in place without being temporarily or permanently relocated.
- 2. Restore items damaged during construction without compensation, to a condition at least equal prior to construction.

B. Trees

1. Tree Protection shall be in accordance with Section 02115 – Tree Protection.

C. Plantings

1. Protect by suitable means or temporarily replant and maintain cultivated hedges, shrubs, and plants which may be injured by the Contractor's operations

- 2. Replant in their original positions and care for until growth is re-established, once the construction operations have been substantially completed.
- 3. If cultivated hedges, shrubs, and plants are injured to such a degree as to affect their growth or diminish their beauty or usefulness, they shall be replaced by items of kind and quality at least equal to which existed prior to the start of the Work.

D. Paved surfaces

- 1. Do not use or operate tractors, bulldozers, or other power-operated equipment with treads or wheels shaped as to cut or injure paved surfaces.
- 2. All surfaces which have been injured by the Contractor's operations shall be restored to a condition at least equal to which existed prior to start of the Work.
- 3. Suitable materials and methods shall be used for such restoration.

3.03 PREPARATION

A. Pavement Removal

- 1. Remove only existing pavement as necessary for the prosecution of the work.
- 2. Owner or Owner's Representative may require that pavement be cut with pneumatic tools or saws without extra compensation to Contractor, where in the opinion of the Owner or Owner's Representative it is necessary to prevent damage to the remaining road surface.
- 3. Dispose large of pieces of broken pavement before proceeding with excavation.

B. Top Soil Removal

1. From areas which excavations are to be made, loam and topsoil shall be carefully removed and separately stored to be used again as directed; or, if the Contractor prefers not to separate surface materials, he shall furnish, as directed, loam and topsoil at least equal in quantity and quality to that excavated. Top soil removal and stockpiling shall be coordinate with Section – 02100 Site Preparation.

C. Subgrade

- 1. Remove loam and topsoil, loose vegetable matter, stumps, large roots, etc., from areas where embankments will be built or material will be placed for grading.
- 2. Shape as indicated on the drawings and prepare by forking, furrowing, or plowing to bond first layer of the new material placed.

3.04 RELOCATION AND REPLACEMENT OF EXISTING STRUCTURES

- A. The structures to which the provisions of this article apply include pipes, wires, and other structures which meet all of the following:
 - 1. Are not indicated on the drawings or otherwise provided for.
 - 2. Encroach upon or are encountered near and substantially parallel to the edge of the excavation.
 - 3. In the opinion of the Owner or Owner's Representative will impede progress to such an extent that satisfactory construction cannot proceed until they have been changed in location, removed (to be later restored), or replaced.
- B. In removing existing pipes or other structures, the Contractor should use care to avoid damage to materials, and the Owner or Owner's Representative shall include for payment

- only those new materials which, in his judgment, are necessary to replace those unavoidably damaged.
- C. Whenever the Contractor encounters certain existing structures as described above and is so ordered in writing, he shall do the whole or such portions of the work as he may be directed to change the location of, remove and later restore, or replace such structures, or to assist the Owner thereof in so doing. For all such work, the Contractor shall be paid under such items of work as may be applicable, otherwise as Extra Work.
- D. When fences interfere with the Contractor's operations, he shall remove and (unless otherwise specified) later restore them to a condition which existed prior to the start of the Work, all without additional compensation. The restoration of fences shall be done as promptly as possible and not left until the end of the construction period.

3.05 SHEETING AND BRACING

- A. Furnish, put in place, and maintain such sheeting, bracing, etc., as necessary to support the sides of the excavation and to prevent any movement of earth which could in any way diminish the width of the excavation to less than that necessary for proper construction, or could otherwise injure or delay the work, or endanger adjacent structures.
- B. Whenever possible, sheeting shall be driven ahead of the excavation to avoid loss of material from behind the sheeting. If it is necessary to excavate below the sheeting, care shall be taken to avoid trimming behind the face along which the sheeting will be driven. Care shall be taken to prevent voids outside of the sheeting, but, if voids occur, they shall be filled immediately with sand and compacted.
- C. Leave in place to be embedded in the backfill, or concrete, all sheeting, bracing, etc., which is indicated on the drawings to be left in place. Leave in place any and all other sheeting, bracing, etc., which the Owner or Owner's Representative may direct to leave in place, at any time during the progress of the work, for the purpose of preventing injury to structures or property.
- D. The Owner's Representative may direct that sheeting and bracing to be left in place be cut off at any specified elevation.
- E. All sheeting and bracing not to be left in place shall be carefully removed in such manner as not to endanger the construction or other structures. All voids left or caused by the withdrawal of sheeting shall be backfilled immediately using suitable materials and compaction methods.

3.06 DEWATERING

A. Ensure proper conditions at all times during construction, provide and maintain ample means and devices (including spare units kept ready for immediate use in case of breakdowns) to intercept and/or remove promptly and dispose properly all water entering trenches and other excavations. Keep excavations dry until the structures, pipes, and appurtenances to be built therein have been completed to such extent that they will not be floated or otherwise damaged.

- B. Dispose of all water pumped or drained from the work in a suitable manner without undue interference with other work, damage to pavements, other surfaces, or property. Provide suitable temporary pipes, flumes, or channels for water that may flow along or across the site of the work.
- C. Provide adequate sedimentation and/or erosion control methods at all times to ensure soil stabilization and protection of surrounding areas including any designated wetlands and/or waterways encountered.

D. Underdrains

- 1. Temporary underdrains, if used, shall be laid in trenches beneath the grade of the structure. Trenches shall be of suitable dimensions to provide room for the chosen size of underdrain and its surrounding gravel.
- 2. Underdrains, if used, shall be laid at a suitable distance below the bottom of the normal excavation and with open joints wrapped in cheesecloth or filter fabric approved by the Owner or Owner's Representative, and entirely surrounded by graded gravel, or crushed stone to prevent the admission of sand or other soil into the underdrains. The distance between the bottom of the pipe or structure and the top of the bell of the underdrain pipe shall be at least 3 in. unless otherwise permitted. The space between the underdrain and the pipe or structure shall be filled with graded gravel or crushed stone which shall be rammed if necessary and left with a surface suitable for laying the pipe or building the structure.

E. Drainage Wellpoint System

- 1. If necessary, dewater the excavations by means of an efficient drainage wellpoint system which will drain the soil and prevent saturated soil from flowing into the excavation.
- 2. The installation of the wellpoints and pump shall be done under the supervision of a competent representative of the manufacturer. The Contractor shall do all special work such as surrounding the wellpoints with sand or gravel or other work which is necessary for the wellpoint system to operate for the successful dewatering of the excavations.

3.07 EXCAVATION

- A. Execute operation of dewatering, sheeting, and bracing without undermining or disturbing foundations of existing structures or of work previously completed under this contract.
- B. Excavate to widths that provide suitable room for:
 - 1. Installing footings per the Drawings and these Specifications.
 - 2. Placing all sheeting, bracing, and supports.
- C. Render bottom of excavations firm, dry and acceptable in all respects.
- D. Do not plow, scrap or dig by machinery, earth at finished subgrade which results in disturbance of material below subgrade, unless indicated or specified, and remove with pick and shovel, last of material to be excavated, just before placing pipe, masonry or other structure.
- E. Make all excavations in open, except as otherwise specified or permitted.

F. Excavation Near Existing Facilities

As the excavation approaches pipes, conduits, or other underground structures, digging by
machinery shall be discontinued and the excavation shall be done by means of hand tools.
Such manual excavation when incidental to normal excavation shall be included in the
work to be done under items involving normal excavation.

G. Unauthorized Excavation

1. If the bottom of any excavation is taken out beyond the limits indicated or prescribed, the resulting void shall be backfilled at the Contractor's expense with thoroughly compacted gravel borrow.

H. Unsuitable Material

1. If material unsuitable for foundations or footings (in the opinion of the Owner or Owner's Representative) is found at or below the grade to which excavation would normally be carried in accordance with the Drawings and/or Specifications, the Contractor shall remove such material to the required width and depth and replace it with thoroughly compacted, crushed stone, gravel borrow, fine aggregate or concrete as directed.

3.08 TRENCHING

A. Trench Excavation

- 1. Where pipe is to be laid in specified bedding material or concrete cradle, the trench may be excavated by machinery to, or to just below, the designated subgrade, provided that the material remaining at the bottom of the trench is no more than slightly disturbed.
- 2. Where pipe is to be laid directly on the trench bottom, the lower part of trenches in earth shall not be excavated to subgrade by machinery, but, just before the pipe is to be placed, the last of the material to be excavated shall be removed by means of hand tools to form a flat or shaped bottom, true to grade, so that the pipe will have a uniform and continuous bearing and support on firm and undisturbed material between joints except for limited areas where the use of pipe slings may have disturbed the bottom.

B. Depth of Trench

1. Excavate trench to depths permitting the pipe to be laid at the elevations, slopes, or depths of cover indicated on the drawings, and at uniform slopes between indicated elevations.

C. Width of Trench

- 1. Excavate trench as narrow as practicable and do not widen by scraping or loosening materials from the sides. Every effort shall be made to keep the sides of the trenches firm and undisturbed until backfilling has been completed and consolidated.
- 2. Excavate trenches with approximately vertical sides between the elevation of the center of the pipe and an elevation 1 ft. above the top of the pipe.

D. Trench Excavation In Fill

1. If pipe is to be laid in embankments or other recently filled material, the material shall first be placed to the top of the fill or to a height of at least 1 ft. above the top of the pipe, whichever is the lesser. Particular care shall be taken to ensure maximum consolidation of material under the pipe location. The pipe trench shall then be excavated as though in undisturbed material.

E. Length of trench open at any one time will be controlled by conditions, subject to any limits that may be prescribed by Owner or Owner's Representative.

3.09 BACKFILLING

A. General

1. Frozen material shall not be placed in the backfill nor shall backfill be placed upon frozen material. Previously frozen material shall be removed or shall be otherwise treated as required, before new backfill is placed.

B. Fill And Backfill Under Structures

1. The fill and backfill materials shall be placed in layers not exceeding 6 in. in thickness. Unless otherwise indicated or specified, each layer shall be compacted to 95 percent in accordance with ASTM D1557.

C. Backfilling Around Structures

- 1. Do not place backfill against or on structures until they have attained sufficient strength to support the loads (including construction loads) to which they will be subjected, without distortion, cracking, or other damage. As soon as practicable after the structures are structurally adequate and other necessary work has been done, special leakage tests, if required, shall be made. Promptly after the completion of such tests, the backfilling shall be started and then shall proceed until its completion. The best of the excavated materials shall be used in backfilling within 2 ft. of the structure. Unequal soil pressures shall be avoided by depositing the material evenly around the structure.
- 2. The material shall be placed and compacted to 90 percent in accordance with ASTM D1557 unless otherwise indicated or specified.

D. Placing and Compacting Embankment Material

- 1. After the subgrade has been prepared as hereinbefore specified, the material shall be placed thereon and built up in successive layers until it has reached the required elevation.
- 2. Layers shall not exceed 12 in. in thickness before compaction. In embankments at structures, the layers shall have a slight downward slope away from the structure; in other embankments the layers shall have a slight downward slope away from the center. In general, the finer and less pervious materials shall be placed against the structures or in the center, and the coarser and more pervious materials, upon the outer parts of embankments.
- 3. Each layer of material shall be compacted by the use of approved rollers or other approved means so as to secure a dense, stable, and thoroughly compacted mass. At such points as cannot be reached by mobile mechanical equipment, the materials shall be thoroughly compacted by the use of suitable power-driven tampers.
- 4. Previously placed or new materials shall be moistened by sprinkling, if required, to ensure proper bond and compaction. No compacting shall be done when the material is too wet, from either rain or too great an application of water, to compact it properly; at such times the work shall be suspended until the previously placed and new materials have dried out sufficiently to permit proper compaction, or such other precautions shall be taken as may be necessary to obtain proper compaction.

5. The portion of embankments constructed below proposed structures shall be compacted to 95 percent in accordance with ASTM D1557. The top 2 ft. of an embankment below a pavement base shall be compacted to 95 percent. All other embankments shall be compacted to 90 percent in accordance with ASTM D1557.

3.10 METHODS OF COMPACTION

A. Water-Jetting

- 1. Saturate backfill material throughout its full depth and at frequent intervals across and along the trench until all slumping ceases.
- 2. Furnish one or more jet pipes, each of sufficient length to reach the specified depth and of sufficient diameter (not less than 1-1/4 in.) to supply an adequate flow of water to compact the material.
- 3. Equip jet pipe with a quick-acting valve, supply water through a fire hose from a hydrant or a pump having adequate pressure and capacity to achieve the required results.

B. Tamping and Rolling

- 1. Deposit backfill material and spread in uniform, parallel layers not exceeding 8 in. thick before compaction. Before the next layer is placed, each layer shall be tamped to obtain a thoroughly compacted mass. Care shall be taken that the material close to the bank, as well as in all other portions of the trench, is thoroughly compacted. When the trench width and the depth to which backfill has been placed are sufficient to make it feasible, and it can be done effectively and without damage to the pipe, backfill may, on approval, be compacted by the use of suitable rollers, tractors, or similar power equipment instead of by tamping. For compaction by tamping (or rolling), the rate at which backfilling material is deposited in the trench shall not exceed that permitted by the facilities for its spreading, leveling, and compacting.
- 2. If necessary to ensure proper compaction by tamping (or rolling), the backfill material shall first be wet by sprinkling. However, no compaction by tamping (or rolling) shall be done when the material is too wet either from rain or too great an application of water to be compacted properly; at such times the work shall be suspended until the previously placed and new materials have dried out sufficiently to permit proper compacting, or such other precautions shall be taken as may be necessary to obtain proper compaction.

C. Miscellaneous Requirements.

- 1. Whatever method of compacting backfill is used, care shall be taken that stones and lumps shall not become nested and that all voids between stones shall be completely filled with fine material. Only suitable quantities of stones and rock fragments shall be used in the backfill; the Contractor shall, as part of the work done under the items involving earth excavation and rock excavation as appropriate, furnish and place all other necessary backfill material.
- 2. All voids left by the removal of sheeting shall be completely backfilled with suitable materials, and thoroughly compacted.

3.11 DISPOSAL OF SURPLUS EXCAVATED MATERIALS

A. No excavated materials shall be removed from the site of the work or disposed of by the Contractor except as directed or permitted by the Owner or Owner's Representative.

- B. Surplus excavated materials suitable for backfill shall be used to backfill normal excavations in rock or to replace other materials unacceptable for use as backfill; shall be neatly deposited and graded so as to make or widen fills, flatten side slopes, or fill depressions; or shall be neatly deposited for other purposes within a haul of 1 mile from the point of excavation; all as directed or permitted and without additional compensation.
- C. Surplus excavated materials not needed as specified above shall be hauled away and dumped by the Contractor, at his expense, at appropriate locations, and in accordance with arrangements made by him.
- D. All excess materials deemed "suitable" by the Owner's Representative are the property of the Owner. The Contractor shall place these materials at a location specified by the Owner within the confines of the area designed on the Drawings or to an off-site location designated by the Owner. The materials shall be placed in a manner that utilizes the available space efficiently and to the satisfaction of the Owner. Reworking the dumped materials to efficiently use stockpile area is considered incidental to the contract and no separate payment will be made.

3.12 DISPOSAL OF SPECIAL WASTES

- A. The Contractor's attention is directed to the requirements set forth by the State of Rhode Island, Department of Environmental Management, (RIDEM) regarding "Special Hazardous Wastes" and the proper disposal thereof. All waste materials and debris, as designated by the Owner and/or Owner's Representative, including but not limited to any sewers, storm drains, catch basins, and combined system pipelines and associated structures, or any portions thereof, including but not limited to sludge, grit, sediment, dirt, sand, rock, grease, roots and other liquid, solid or semi-solid materials contained therein, shall be considered "Type 5 - Rhode Island Special Hazardous Waste (005)" In addition, any excavated soils contaminated in any manner, as designated by the Owner and/or Owner's Representative, shall also fall under this category and shall be handled the same. When so encountered, all such materials and debris shall be removed to the extent so ordered by the Owner or Owner's Representative and properly disposed of in strict compliance with the requirements of the RIDEM, Division of Waste Management, Rules and Regulations for Hazardous Waste Management, amended 4/19/92. and other regulating authorities to an approved and certified waste disposal site. It shall remain the sole responsibility of the Contractor to apply for and obtain all required permits, bonds and/or insurance relative to such disposal. The Contractor shall also pay all costs associated with the disposal, required permits, bonds and insurance with no additional expense to the Owner. All handling of such "Special Hazardous Waste" shall be done in strict compliance with the RIDEM requirements and/or any other federal, state or local agency having jurisdiction or authority over the same. Under no circumstances shall sewage, solids or other "Special Hazardous Wastes" removed from the sewer lines be dumped or spilled onto the streets or into ditches, catch basins or storm drains. The Contractor must use watertight and State approved vehicles in transporting any wastes as hereinbefore designated.
- B. The Contractor shall indemnify and save harmless the Owner and Owner's Representative and all persons acting for or on behalf of the Owner and Owner's Representative from all claims and liability of any nature or kind, and all damages, costs and expenses, including attorney's fees and penalties, arising from the improper handling, transportation or disposal of

"Special Hazardous Wastes" as determined by the RIDEM and/or any other federal, state or local agency having jurisdiction or authority over the same.

3.13 DUST CONTROL

A. During the progress of the Work, maintain the area of activities, by sweeping and sprinkling of streets to minimize the creation and dispersion of dust. If the Owner or Owner's Representative decides that it is necessary to use calcium chloride for more effective dust control, the Contractor shall furnish and spread the material, as directed.

3.14 FIELD QUALITY CONTROL

- A. Site Tests
 - 1. In accordance with SECTION 01410

3.15 CARE AND RESTORATION OF PROPERTY

A. Restoration of existing property or structures done as promptly as practicable and not left until the end of the construction period.

SECTION 02215

AGGREGATE MATERIALS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes

- 1. Requirements for furnishing and placing materials, which include Crushed Stone, Gravel Borrow and Select Borrow.
- 2. Location of specified materials as detailed on the Drawings or as directed by the Owner for excavation below normal depth, utility support, replacement of unsuitable material or elsewhere, as ordered.

B. Related Sections

- 1. Section 02200 Earth Excavation, Backfill, Fill and Grading.
- 2. Section 02500 HMA Pavement
- 3. Section 03300 Cast-in-place Concrete

1.02 REFERENCES

- A. American Association of State Highway and Transportation Officials (AASHTO).
 - 1. T11, Amount of Material Finer than 0.075 mm Sieve in Aggregate
 - 2. T27, Sieve Analysis of Fine and Coarse Aggregates.
- B. American Society for Testing and Materials (ASTM).
 - 1. D1557, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³ (2,700 kN-m/m³)).

1.03 DEFINITIONS

A. The term Screened Gravel as used in the Contract Documents shall mean Crushed Stone.

1.04 SUBMITTALS

A. Shop Drawings

1. Provide sieve analysis when gradation requirements are given in the Specification.

B. Samples

1. Furnish representative sample including location of source with Shop Drawing transmittal sheet.

1.05 QUALITY ASSURANCE

A. Field Samples

1. The attention of the Contractor is directed to the fact that under Specification SECTION 00500, 1.03 Materials and Equipment, all materials furnished by the Contractor to be incorporated into the Work shall be subject to the inspection of the Owner. The owner shall be the sole judge as to the acceptability of proposed materials and said judgement shall be final, conclusive, and binding.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Storage and Protection

1. In accordance with Specification SECTION 00500, 1.03 Materials and Equipment.

PART 2 PRODUCTS

2.01 MATERIALS

A. Crushed Stone

- 1. Crushed Stone shall conform to the State of Rhode Island Department of Transportation (RIDOT) Standard Specifications, 2004 Edition with latest addenda.
- 2. Clean, hard, and durable particles or fragments, free from dirt, vegetation, or other objectionable matter, and free from an excess of soft, thin elongated, laminated, or disintegrated pieces.
- 3. Screened Stone of similar size and grading to this specification may be used instead of Crushed Stone.

B. Gravel Borrow

- 1. Gravel Borrow shall conform to the State of Rhode Island Department of Transportation (RIDOT) Standard Specifications, 2004 Edition with latest addenda.
- 2. Granular material well graded from fine to coarse with a maximum size of 3 inches, obtained from approved natural deposits and unprocessed except for the removal of unacceptable material and stones larger than the maximum size permitted.
- 3. Gravel shall not contain vegetation, masses of roots, or individual roots more than 18 inches long or more than 1/2 inches in diameter.
- 4. Gravel shall be substantially free from loam and other organic matter, clay and other fine or harmful substances.
- 5. Gradation requirements for gravel shall be determined by AASHTO-T11 and T27 and conform to the following:

| Sieve | Percent Passing |
|----------|-----------------|
| 1/2 inch | 60-95 |
| No. 4 | 50-85 |
| No. 50 | 8-28 |
| No. 200 | 0-8 |

C. Select Borrow

1. Use inorganic natural soils and/or rock, having not more than 8 percent by weight passing the No. 200 sieve and having a maximum stone size no greater than 6-inches.

- 2. Use only material well-graded throughout entire size range, free of roots, leaves and other organic material, ice or frost and aggregations of frozen soil particles.
- 3. Moisture content to be within plus minus 3 percent optimum at the borrow source.
- 4. Material must meet compaction requirements indicated or as specified.

D. Gravel Base Course

1. In accordance with SECTION 02500.

E. Angular Trap Rock

- 1. Granular material with a min. size of 2", obtained from approved natural deposits and unprocessed except for the removal of unacceptable material.
- 2. Angular trap rock shall not contain vegetation, masses of roots, or individual roots more than 18 inches long or more than 1/2 inches in diameter.
- 3. Angular trap rock shall be substantially free from loam and other organic matter, clay and other fine or harmful substances.

2.02 SOURCE QUALITY CONTROL

A. Test, Inspection

- 1. Engineer may elect to sample material supplied at the source.
- 2. Assist the Engineer and/or personnel from the designated testing laboratory in obtaining samples.

PART 3 EXECUTION

3.01 INSTALLATION

A. Crushed Stone

- 1. Spread in layers of uniform thickness not greater than 6 inches.
- 2. Compact thoroughly by means of a suitable vibrator or mechanical tamper.

B. Gravel Borrow

- 1. Spread in layers of uniform thickness not exceeding 12 inches before compaction and moistened or allowed to dry as directed.
- 2. Compact thoroughly by means of suitable power-driven tampers or other power-driven equipment.
- 3. Compaction shall conform to 95% of minimum dry density per ASTM D1557.
- 4. The percolation rate for the compacted bank-run gravel shall not exceed 5 minutes per inch.

C. Select Borrow

- 1. Spread in layers of uniform thickness not exceeding 12 in. (loose lift) before compaction and moistened or allowed to dry.
- 2. Compact thoroughly by means of suitable power-driven tampers or other power-driven equipment unless otherwise directed by the Engineer.

3.02 FIELD QUALITY CONTROL

A. Material and compaction testing

1. In accordance with SECTION 01410.

SECTION 02500

HOT MIX ASPHALT (HMA) PAVEMENT

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes

1. Requirements for construction of all temporary and permanent pavements on paved areas affected or damaged by the Contractors operations, whether inside or outside the normal trench limits, as indicated on the Drawings and as herein specified.

B. Related Sections

1. Section 02200 - Earth Excavation, Backfill, Fill and Grading

1.02 REFERENCES

- A. This specification makes reference to the requirements of additional specifications as listed. The Contractor shall obtain and familiarize himself with all requirements referenced by this specification prior to preparation and installation of any pavements.
 - 1. Rhode Island Department of Transportation, Standard Specifications for Road and Bridge Construction, including all addenda, issued by the State of Rhode Island Department of Public Works. (Referred to as the Standard Specification).

1.03 DEFINITIONS

B. The term Bituminous Concrete as used in the Construction Drawings shall mean Hot Mix Asphalt (HMA) Pavement.

1.04 PAVEMENT SCHEDULE

- A. The Contractors attention is directed to the various pavements required under this Contract, and their locations as detailed on the Contract Drawings.
 - 1. All pavement thickness indicated on the Contract Drawings shall be of the thickness required after compaction.

PART 2 PRODUCTS

2.01 MATERIALS

A. Asphalt Tack

1. Tack coat shall conform to the applicable provisions of Section M0.3, Materials, and Section 403, Asphalt Emulsion Tack Coat of the Standard Specifications.

B. Binder Course, Full Width

1. Base Course shall conform to the requirements of the RIDOT Standard Specification Section 401, Class 12.5.

C. Wearing Surface, Full Width

1. Surface Course shall conform to the requirements of the RIDOT Standard Specification Section 401, Class 9.5.

D. Temporary Pavement

1. Temporary Pavement shall be Surface Course conforming to the requirements of the RIDOT Standard Specification Section 410, Class 9.5 or High Performance Cold Patching Material, as set forth in Subsection M03.04 of the Standard Specification.

E. Gravel Borrow Base Course

1. The Gravel Sub-Base Course in accordance with Standard Specification Subsection M01.09, meeting the gradation requirements of Table 1, Column 1, with 100% passing 3inch Square Mesh Sieves.

2.02 SOURCE QUALITY CONTROL

- A. The paving plant used by the Contractor for preparation of all paving materials shall be acceptable to the Engineer who shall have the right to inspect the plant and the making of the material as specified in RIDOT Standard Specification.
- B. The Contractor shall provide Quality Control including but not limited to preparing and maintaining an approved Quality Control Plan, preparing HMA mix designs, conducting construction quality and pre pavement placement meetings, providing a field reference system, performing QC inspection, sampling and testing. Evaluating all QC data and maintaining all QC records. Providing samples and construction of test/control strip if required.

PART 3 **EXECUTION**

3.01 **PREPARATION**

- A. Prior to placing pavement, all backfill shall have been properly compacted as specified under Section 02200 to eliminate settling of backfill. No pavement shall be placed over poorly compacted backfill. Backfill and gravel base course shall be compacted, brought to the proper elevation, and dressed so that new pavement construction shall be at the required grade. The Contractor shall maintain the surfaces of all excavated and disturbed areas until the pavement is placed. If there is a time lapse of more than 24 hours between completion of preparation of subgrade or placing of gravel base course and placing of pavement, or if subgrade or gravel base course has been eroded or disturbed by traffic, the subgrade or gravel base course shall be restored before placing pavement.
- B. When installing permanent trench pavement on roadways with existing bituminous pavement, the edges of existing pavement shall be cut back 12-inches, or more as required, from the trench excavation wall or damaged area to sound undamaged material, straightened, and cleaned. Existing surface courses shall be stripped from the bituminous base course for at least a 6-inch width and trimmed square and straight so that new pavement shall be placed on existing, sound bituminous base course. Existing pavement that will

underlay or butt new pavement shall be swept clean and have all edges and surfaces exposed to new pavements painted with asphalt emulsion to ensure a satisfactory bond.

- C. Before permanent pavement is installed all undelaying temporary pavement and excess gravel base shall be removed and the base shall be brought to the proper grade
- D. All manhole covers, catch basin grates, valve and meter boxes, curbs, walks, walls and fences shall be adequately protected and left in a clean condition. Where required, the grades of manhole covers, catch basin grates, valve boxes, and other similar items shall be adjusted to conform to the finished pavement grade.
- E. The Contractor shall remove and acceptably dispose of all surplus and unsuitable material.

3.02 INSTALLATION

A. General,

- 1. Unless indicated otherwise, all permanent HMA pavements shall be installed in multiple courses
- 2. Trench width HMA base courses shall be carefully spread and raked to a uniform surface and thoroughly rolled.
- 3. All surface courses of permanent paving shall be applied with acceptable mechanical spreaders in widths of at least 9 feet.
- 4. The rolling for all HMA and gravel base courses shall conform to the standards listed in the appropriate Subsection of the RIDOT Standard Specification.
- 5. Pavements shall be placed so that the entire roadway or paved area shall have a true and uniform surface, and the pavement shall conform to the proper grade and cross section with a smooth transition to existing pavement.

B. Gravel Borrow Base Course

- 1. Place to such depth that the finished compacted base course is the depth as indicated on the Contract Drawings and specified herein.
- 2. The top of the base course shall be below the finish grade a distance required to accommodate the compacted pavement material as indicated on the Contract Drawings and specified herein.
- 3. The gravel base shall be spread and compacted in layers not exceeding 8 inches in depth compacted measurement, to not less than 95 percent of the maximum dry density of the material, as determined by the Standard AASHTO Test Designation T99 compaction test Method C within 5% of optimum moisture content as determined by the Engineer. Any stone with a dimension greater than the maximum size specified shall be removed from the base material before the gravel is compacted. Compaction shall continue until the surface is even and true to the proposed lines and grades within a tolerance of ½-inch above or below the required cross sectional elevations and to a maximum irregularity not exceeding ½ inch under a 10 foot line longitudinally. Any specific area a gravel sub-base which, after being rolled, does not form a satisfactory, solid, stable foundation shall be removed, replaced and recompacted by the Contractor without additional compensation.

C. Temporary Pavement

1. Install over all trenches in paved areas where directed by the Engineer.

- Construct upon completing the backfilling and compaction of the trenches and the placing of the gravel base courses in the streets or other paved areas unless directed otherwise by the Engineer.
- 3. Install in one course to the thicknesses indicated on the Contract Drawings, as specified or as directed by the Engineer.
- 4. Maintain in good repair and flush with the existing pavement at all times until the permanent pavement is placed.
- 5. The temporary pavement shall not be removed until 60 days after installation or until such time that the Engineer authorizes the placement of permanent pavement at an earlier time.

D. HMA Base Course

- 1. Install as indicated on the Contract Drawings.
- 2. Install in accordance with the applicable requirements of Section 401 of the RIDOT Standard Specification and as detailed in the Contract Drawings.
- 3. Prior to placing Base Course, all temporary pavement and sufficient gravel base course shall be removed, to proper depths as detailed in the Contract Drawings.

E. HMA Surface Course

- 1. Install as indicated on the Contract Drawings.
- 2. Install in accordance with the requirements of the applicable requirements of Section 401 the RIDOT Standard Specification and as detailed in the Contract Drawings.

F. Sidewalks, Driveways, Parking Lots and Curbing,

- 1. Sidewalks, driveways, parking lots and curbing that are removed or damaged by the Contractor's operations shall be restored to a condition at least equal to that in which they are found immediately prior to the start of operations. Materials and methods used for such restoration shall be in conformance with the requirements of the RIDOT Standard Specification and this Section.
- 2. Gravel base course under bituminous asphalt pathways and sidewalks shall not be less than 8-inches thick.
- 3. Gravel base course under bituminous asphalt driveways and roadways shall not be less than 12-inches.

G. Surface Maintenance

1. During the guarantee, period, the Contractor shall maintain the new HMA surface in a safe and satisfactory condition for traffic and shall promptly make good all defects such as cracks, depressions, and holes that may occur. After removing the defective HMA, the Contractor shall correct the cause of the defect and replace all pavements in accordance with these specifications.

SECTION 02870

SITE AMENITIES

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes

1. The work of this Section consists of providing all labor, equipment, materials, incidental work, and construction methods necessary to purchase, deliver and install site Amenities in locations as shown and detailed on the Drawings.

1.02 SUBMITTALS

- A. Submit manufacturer's product data, shop drawings and standard manufacturer warranty for the following:
 - 1. Bench
 - 2. Trash Receptacle
 - 3. Collapsible Bollard

1.03 DELIVERY, STORAGE AND HANDLING

A. Site Amenities shall be protected against theft and damage. Missing or damaged items shall be replaced at no additional cost to the Owner.

PART 2 PRODUCTS

2.01 MATERIALS

A. Bench shall be:

- 1. <u>Model 88-60PL by Dumor or approved equal,</u> 138 Industrial Circle, Mifflintown, PA 17059, Phone: 800-598-4018.
 - a. Material shall be recycled plastic.
 - b. Length shall be 6 foot and include end armrests.
 - c. Mounting method shall be surface mount.
 - d. Color shall be Cedar.
 - e. Located and installed as shown on the drawings and per the manufacturer's specification.

B. Trash Receptacle shall be:

- 1. <u>Model 148-32SH by Dumor or approved equal.</u> 138 Industrial Circle, Mifflintown, PA 17059, Phone: 800-598-4018.
 - a. Capacity shall be 32 gallons.
 - b. Cover shall be dome (DM).
 - c. Mounting method shall be surface mount.
 - d. Color shall be Black.
 - e. Locate and install as shown on the drawings.

C. Collapsible Bollard shall be:

- 1. Model HRP48 by Trafficguard, Inc. or approved equal. P.O. Box 201 Geneva, IL 60134-9956, Phone: 877-727-7347.
 - a. Height shall be 48".
 - b. Shall be round in shape with 2.5" O.D. schedule 40 pipe.
 - c. Caps shall be welded in place.
 - d. All hardware shall be galvanized.
 - e. Color shall be yellow.

PART 3 EXECUTION

3.01 PREPARATION

- A. Prior to excavating, confirm site furnishing locations and measure to verify clearances.
- B. Positively verify that there are no utilities present in conflict with the excavation.
- C. Inspect all abutting conditions and confirm final line and grade prior to starting work.

3.02 INSTALLATION

A. General

- 1. Review the manufacturer's data regarding the bench, trash receptacle, and collapsible bollard.
- 2. Place bench, trash receptacle, and collapsible bollard in position and confirm location with the Owner or Owner's Representative.
- B. Install Bench, Trash Receptacle, and Collapsible Bollard per manufacturer's recommendations at locations as shown on the drawings. Install plumb and level. Repair minor damage to finish in accordance with manufacturer's instructions and as approved by the Owner or Owner's Representative. Remove and replace any damaged components that cannot be successfully repaired. Clean promptly after installation per manufacturer's instructions using materials that will not damage the finish.
- C. Drill and set tamper-proof epoxy anchor bolts to secure all surface mounted site amenities. Size bolts as per manufacturer's recommendations.

SECTION 02881

PLAYGROUND EQUIPMENT INSTALLATION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Requirements to furnish and install the play equipment and amenities, as shown on the plans and as specified within.

1.02 RELATED SECTIONS

- A. Section 02100 Site Preparation
- B. Section 02220 Earth Excavation, Backfill, Fill and Grading
- C. Section 02882 Polyurethane Safety Surfacing
- D. Section 03300 Cast-In-Place Concrete

1.03 SUBMITTALS

- A. Shop Drawings, submit in accordance with SECTION 01300.
 - 1. Include catalogue cuts for all play equipment
 - 2. Submit drawings of play equipment layout and foundation
 - 3. Include detailed information, specifications, sizes and dimensions for all materials, accessories, and finishes

B. Quality Control Submittals

- 1. Manufacturer's recommended installation instructions
- 2. Provide documented experience of at least three (3) Landscape Structures playgrounds with equipment valued at or over \$100,000.00 or provide documentation of being a certified Landscape Structures installer

1.04 GUARANTEE/WARRANTY

- A. Any defective components, hardware or other manufacturer-supplied materials shall be reported to the Owner's Representative and the Owner and shall be replaced by the Manufacturer under the Owner's Warranty. Contractor shall coordinate the ordering and receipt of replacement parts with the Owner and the Owner's Representative.
- B. The Contractor and the manufacturer shall hold the Owner and Owner's Representative harmless from any damages or liability resulting from negligent acts or omissions on the part of the Contractor or manufacturer, or resulting from defective parts, or improperly assembled equipment.

C. The General Contractor shall secure guidance of play equipment supplier in the correct installation practice for each particular equipment item including delivery to site.

PART 2 PRODUCTS

2.01 GENERAL

- A. Existing play structures and equipment are manufactured by BYO Recreation, a Playcore Company and Superior Recreational Products, a Playcore Company. Proposed play structure is manufactured by Landscape Structures.
- B. The Contractor shall relocate (2) existing play structures and install them as shown on the drawings and per the manufacturer's recommendations
- C. The Contractor shall purchase and install (1) new play structure as shown on the drawings and per manufacturers recommendations.
- D. The Contractor shall have a Certified Playground Safety Inspector (CPSI) onsite during the installation of the playground equipment.

2.02 PLAY STRUCTURES

A. Existing play structures and equipment to be relocated are:

| | | _ | |
|----|--------------------|---------------------|-------------------------------------|
| 1. | Structure 6002-PP | Amazing Race | BY: BYO Recreation |
| 2. | Model # 90007103XX | Chain Climbing Wall | BY: Superior Recreational Products. |

B. Proposed playground structure shall be:

| 1. | (1) 177332 | Single Post Swing 8' Ht. | By: Landscape Structures |
|----|------------|---------------------------------------|--------------------------|
| 2. | (1) 177333 | Single Post Additional Bay 8' Ht. | By: Landscape Structures |
| 3. | (2) 174018 | Belt Seat w/ Proguard Chains | By: Landscape Structures |
| 4. | (1) 177352 | Infant Bucket Seat w/ Proguard Chains | By: Landscape Structures |
| 5. | (1) 177350 | Molded Bucket Seat w/ Proguard Chains | By: Landscape Structures |

2.03 CONCRETE FOUNDATIONS

A. 4000 PSI, ³/₄ IN., 585 Cement Concrete, conforming to the relevant provisions of Subsection 901, shall be used for the construction of the cement concrete foundations.

2.04 SAFETY SURFACING

- A. See Section 02887 Polyurethane Safety Surfacing.
- B. See Section 02888 Engineered Wood Fiber Safety Surfacing

3.01 GENERAL

A. Installation shall be as recommended by the manufacturer and as shown on the drawings and as noted below.

3.02 PLAYGROUND EQUIPMENT

- A. The Contractor shall install the foundations and structures to the lines and grades specified in the equipment manufacturer's drawings and these Specifications. Adjust all equipment to suit site gradients; no sloping platforms, track, or members intended to be horizontal shall be accepted.
- B. The excavation for the footings shall be done according to Specification Section 02200 Earth Excavation and according to the contract drawing details.
- C. The equipment shall be located and brought to the heights as shown in the manufacturer's drawings and as recommended by the manufacturer with vertical and horizontal members set plumb and then braced to be held in place.
- D. The concrete shall be poured and cured according to SECTION 03300 Concrete. The concrete shall be poured around the supporting pieces of the equipment to the proposed finished grades and as directed. Slope tops of footings to drain; set bottom of vertical members into gravel base to ensure drainage; do not encase bottom in concrete.
- E. After the specified cure period of the concrete has passed, the bracing may be removed. The fills and surfaces shall then be placed and brought to the grades shown in the contract drawings and in accordance with the Standard Specifications.
- F. Distance of equipment from any obstructions and discharge at end of slides shall conform to current CPSC guidelines and ASTM standards.

SECTION 02887

POLYURETHANE SAFETY SURFACING

PART 1 GENERAL

1.01 SCOPE OF WORK

A. The Contractor shall furnish all labor, materials, equipment, and transportation required the placement and compaction of resilient play surfacing at the play areas. The surfacing shall be placed at all locations identified on the Contract Drawings to the indicated depths.

1.02 REFERENCES

- A. Resilient Safety Surface design, layout, and installation shall comply with the following standards and guidelines as applicable.
 - 1. American Society for Testing and Materials (ASTM):
 - 2. ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers-Tension.
 - 3. ASTM D624 Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers.
 - 4. ASTM D2047 Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine.
 - 5. ASTM D2859 Standard Test Method for Flammability of Finished Textile Floor Covering Materials.
 - 6. ASTM E303 Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester.
 - 7. ASTM F1292 Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment.
 - 8. ASTM F1951 Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.

1.03 SUBMITTALS

- A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.
 - 1. Product Data: Submit manufacturer's product data and installation instructions.
 - 2. Verification Samples: Submit manufacturer's standard verification samples of 9" x 9" (229 x 229 mm) minimum showing color and/or mixed color samples.
 - 3. Quality Assurance/Control Submittals: Submit the following:
 - a. Certificate of qualifications of the playground surfacing installer.
- B. Closeout Submittals: Submit the following:
 - a. Warranty documents specified herein.

1.04 QUALITY ASSURANCE

- A. Qualifications: Utilize an installer approved and trained by the manufacturer of the playground surfacing system, having experience with other projects of the scope and scale of the work described in this section. Project experience shall be submitted, upon request by the Owner or Owner's Representative.
- B. Certifications: Certification by manufacturer that installer is an approved applicator of the playground surfacing system.
- C. Installer must be International Play Equipment Manufacturers Association (IPEMA) certified

1.05 DELIVERY, STORAGE & HANDLING

- A. General: Comply with Division 1 Product Requirement Section.
- B. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- C. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at a minimum temperature of 40 degrees F (4 degrees C) and a maximum temperature of 90 degrees F (32 degrees C).

1.06 PROJECT/SITE CONDITIONS

- A. General: Comply with Division 1 Product Requirement Section.
- B. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- C. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at a minimum temperature of 40 degrees F (4 degrees C) and a maximum temperature of 90 degrees F (32 degrees C).

1.07 WARRANTY

- A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under contract documents.
- C. Proper drainage is critical to the longevity of the PlayBound Poured-in-Place surfacing system. Inadequate drainage will cause premature breakdown of the poured system in affected areas; and void the warranty.
- D. Warranty Period: Extreme-10 (when aliphatic urethane for the top surface is specified): 10 years from date of completion of work.

PART 2 PRODUCTS

2.01 POURED-IN-PLACE PLAYGROUND SURFACING SYSTEM

- A. Manufacturer: Surface America, Inc.
 - 1. Contact: PO Box 157, Williamsville, NY 14231; Telephone: (800) 999-0555, (716) 632-8413; Fax: (716) 632-8324; E-mail: info@surfaceamerica.com; website: http://www.surfaceamerica.com.
- B. Products/Systems. Poured-in-place playground surfacing system, including the following:
 - 1. PlayBound Poured-In-Place Primer:
 - a. Material: Urethane.
 - 2. PlayBound Poured-in-Place Basemat:
 - a. Material: Blend of 100% recycled SBR (styrene butadiene rubber) and urethane.
 - b. Thicknesses shown for reference only. Contractor shall coordinate basemat thicknesses with the manufacturer.
 - c. Formulation Components: Blend of strand and granular material.
 - 3. PlayBound Poured-In-Place Top Surface:
 - a. Material: Blend of Virgin EPDM (ethylene propylene diene monomer) rubber or TPV Granule and aliphatic urethane binder.
 - b. Thickness: Nominal 1/2" (12.7 mm), minimum 3/8" (9.5 mm), maximum 5/8" (15.9 mm).
 - c. Color: Color shall be <u>Sky Blue and Black</u>. Final Colors shall be approved by the Owner or Owner's Representative from the standard (non-premium) colors including: [Terra Cotta Red] [Gold] [Beige] [Bright Green] [Hunter Green] [Sky Blue] [Royal Blue] [Pearl] [Eggshell] [Brown] [Light Gray] [Dark Gray].
 - d. Dry Static Coefficient of Friction (ASTM D2047): 1.0.
 - e. Wet Static Coefficient of Friction (ASTM D2047): 0.9.
 - f. Dry Skid Resistance (ASTM E303): 89.
 - g. Wet Skid Resistance (ASTM E303): 57.
 - 4. Or approved equal

2.02 MIXES

- A. Required mix proportions by weight:
 - 1. Basemat: 16+% urethane (as ratio: 14% urethane divided by 86% rubber). 14% urethane, 86% rubber (based on entire rubber & urethane mix).
 - 2. Top Surface: 22% urethane (ratio: 18% urethane divided by 82% rubber). 18% urethane, 82% rubber (based on entire rubber & urethane mix).

PART 3 - EXECUTION

3.01 MANUFACTURER'S INSTRUCTIONS

A. Comply with the instructions and recommendations of the playground surfacing manufacturer.

3.02 EXAMINATION

- A. Substrate preparation must be in accordance with surfacing manufacturer's specification.
- B. Providing positive drainage is critical to the longevity of the PlayBound Poured-in-Place surfacing system. Inadequate drainage will cause premature breakdown of the poured system in affected areas; and void the warranty.

3.03 PREPARATION

A. Surface Preparation: Using a brush or short nap roller, apply primer to the substrate perimeter and any adjacent vertical barriers such as playground equipment support legs, curbs or slabs that will contact the surfacing system at the rate of 300 ft2/gal (7.5 m2/L).

3.04 INSTALLATION

A. Do not proceed with playground surfacing installation until all applicable site work, including substrate preparation, playground equipment installation and other relevant work, has been completed.

B. Basemat Installation:

- 1. Using screeds and hand trowels, install the basemat at a consistent density of 29 pounds, 1 ounce per cubic foot (466 kg/m3) to the specified thickness.
- 2. Allow basemat to cure for sufficient time so that indentations are not left in the basemat from applicator foot traffic or equipment.
- 3. Do not allow foot traffic or use of the basemat surface until it is sufficiently cured.
- C. Primer Application: Using a brush or short nap roller, apply primer to the basemat perimeter and any adjacent vertical barriers such as playground equipment support legs, curbs or slabs that will contact the surfacing system at the rate of 300 ft2/gal (7.5 m2/L).

D. Top Surface Installation:

- 1. Using a hand trowel, install top surface at a consistent density of 58 pounds, 9 ounces per cubic foot (938 kg/m3) to a nominal thickness of 1/2" (12.7 mm).
- 2. Allow top surface to cure for a minimum of 48 hours.
- 3. At the end of the minimum curing period, verify that the top surface is sufficiently dry and firm to allow foot traffic and use without damage to the surface.
- 4. Do not allow foot traffic or use of the surface until it is sufficiently cured.

3.05 PROTECTION

- A. Protect the installed playground surface from damage resulting from subsequent construction activity on the site.
- B. Contractor must ensure protection of surface until fully cured. Contractor shall be responsible for any damages resulting from improper security.

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SECTION 02888

ENGINEERED WOOD FIBER SAFETY SURFACING

PART 1 GENERAL

1.01 SCOPE OF WORK

A. The Contractor shall furnish all labor, materials, equipment, and transportation required the placement and compaction of resilient play surfacing at the play areas. The surfacing shall be placed at all locations identified on the Contract Drawings to the indicated depths.

1.02 REFERENCES

- A. Resilient Safety Surface design, layout, and installation shall comply with the following standards and guidelines as applicable.
 - 1. American Society for Testing and Materials (ASTM):
 - 2. ASTM F1292 Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment.
 - 3. ASTM F1951 Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.
 - 4. ASTM F2075: Standard for Engineered Wood Fiber Minimum characteristics for those factors that determine particle size, consistency, purity and ability to drain.

1.03 SUBMITTALS

- A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.
 - 1. Product Data: Submit manufacturer's product data and installation instructions.
 - 2. Quality Assurance/Control Submittals: Submit the following:
 - a. Certificate of qualifications of the playground surfacing installer.
- B. Closeout Submittals: Submit the following:
 - a. Warranty documents

1.04 QUALITY ASSURANCE

- A. Qualifications: Utilize an installer approved and trained by the manufacturer of the playground surfacing system, having experience with other projects of the scope and scale of the work described in this section. Project experience shall be submitted, upon request by the Owner or Owner's Representative.
- B. Certifications: Certification by manufacturer that installer is an approved applicator of the playground surfacing system.
- C. Installer must be International Play Equipment Manufacturers Association (IPEMA) certified

1.05 DELIVERY, STORAGE & HANDLING

- A. General: Comply with Division 1 Product Requirement Section.
- B. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- C. Storage and Protection: If needed, store materials protected from exposure to harmful environmental conditions.

1.06 WARRANTY

- A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under contract documents.
- C. Warranty Period: 15-year performance warranty.

PART 2 PRODUCTS

2.01 ENGINEERED WOOD FIBER SAFETY SURFACING

B. Products:

- 1. Product is manufactured of a ground wood fiber comprised of softwoods and/or hardwoods, consisting of randomly sized wood fibers the majority of which do not exceed 2" in length and no more than 15% fines to aid in compaction.
- 2. Product to have minimal bark and to be free of twigs, leaf debris and other organic material.
- 3. Product depth, after installation, must be in accordance with the procedure described in ASTM F1292 and meet guidelines for critical height as set forth by the Consumer Product Safety Commission for use of wood products for protective surfacing

PART 3 EXECUTION

3.01 MANUFACTURER'S INSTRUCTIONS

A. Comply with the instructions and recommendations of the playground surfacing manufacturer.

3.02 PREPARATION

- A. Excavate area to proper depth. Substrate must be firmly compacted, especially when additional fill material has been provided. The substrate should be free of stones, roots and other vegetation
- B. Surface Preparation: A (1) percent grade is recommended for proper drainage.

3.03 INSTALLATION

- A. Do not proceed with playground surfacing installation until all applicable site work, including substrate preparation, playground equipment installation and other relevant work, has been completed.
- B. Place 6 in. of drainage gravel wrapped in geotextile fabric. Slit fabric to fit around equipment uprights. Where possible, overlap all slits with next piece of fabric.
- C. Install the engineered wood fiber to the proper depth, mounding in the center of the play areas of the playground. Extra material shall be provided to allow for compaction. Use a small front-end loader or hand rake to spread surfacing. Operator should be careful not to travel on the fabric or turn sharply on the engineered wood fiber. Install all the material delivered and please note that the surfacing will be several inches above grade until it compacts. Engineered wood fiber needs to be compacted in order to be considered handicapped accessible. For a smooth finished surface, hand rake.

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SECTION 02930

LOAMING AND SEEDING

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Requirements for loaming, fertilizing, seeding, and related work in areas disturbed in the process of performing the Work under this contract.

1.02 SUBMITTALS

- A. In accordance with SECTION 01300 submit the following:
 - 1. Submit with seed, certificates confirming seed mixture, purity, germinating value, and crop year identification.
 - 2. Submit test samples of loam.

1.03 DELIVERY, STORAGE AND HANDLING

A. Fertilizer:

- 1. Delivered mixed as specified in standard size, unopened containers showing weight, analysis, and name of manufacturer.
- 2. Store in weather proof place.

B. Seed:

1. Delivered in original unopened containers with mixture listed.

1.04 REFERENCES

- A. This specification makes reference to the requirements of additional specifications as listed. The Contractor shall familiarize themselves with all requirements reference by this specification.
 - 1. State of Rhode Island Department of Transportation (RIDOT) Standard Specifications, 2004 Edition with latest addenda.

PART 2 PRODUCTS

2.01 LOAM

A. Fertile, natural topsoil, typical of locality, without admixture of subsoil, refuse or other foreign materials, and obtained from well-drained arable site. Mixture of sand, silt and clay particles in approximately equal proportions. Free of stumps, roots, heavy or stiff clay, stones large than 1 inch in diameter, lumps, coarse sand, noxious weeds, sticks, brush or other deleterious matter.

- B. Not less than 5 percent nor more than 20 percent organic matter as determined by loss on ignition of oven-dried samples.
- C. Loam test samples dried to constant weight at temperature of 230 degrees. F., plus or minus nine degrees.
- D. Use loam, having prior vegetative growth that did not contain toxic amounts of either acid or alkaline elements.

2.02 LIME, FERTILIZER AND SEED

- A. Ground agricultural limestone containing not less than 85 percent of total carbonates.
- B. Complete fertilizer, at least 50 percent of nitrogen derived from natural organic sources of ureaform and containing following percentages by weight:

Nitrogen 10%

Phosphorus 10%

Potash 10%

C. Turf grass seed, clean, high in germinating value and latest year's crop mixture as follows:

| | Minimum | . | . |
|---------------------------|----------------------|-------------------|------------------------|
| Name | Proportion by Weight | Percent Purity | Percent Germination |
| Kentucky bluegrass | 20% | 87% | 85% |
| Merion Kentucky bluegrass | 20% | 87% | 85% |
| Red Chewings fescue | 45% | 98% | 85% |
| Italian rye | 15% | 98% | 90% |

PART 3 EXECUTION

3.01 GENERAL

A. Supply suitable quantities of water, hose, and appurtenances.

3.01 LOAM

A. Spread loam on areas to 4-inch depth after compaction, fine grade and compact.

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APPENDIX E-103

3.02 LIME, FERTILIZER AND SEEDING

- A. Apply lime by mechanical means at rate of 3000 pounds per acre.
- B. Apply fertilizer at rate of 1200 pounds per acre.
- C. Remove weeds or replace loam and reestablish finish grades, if any delays in seeding lawn areas and weeds grow on surface or loam is washed out prior to sowing seed and without additional compensation. Sow seed at rate of 175 pounds per acre on calm day, by mechanical means. "Hydro-Seeding" not permitted unless otherwise permitted or required by the Owner or Owner's Representative. Sow one-half of seed in one direction, and other half

at right angles to original direction. Rake seed lightly into loam, to depth of not more than 1/4 inch and compact by means of an acceptable lawn roller weighing 100 to 150 pounds per linear foot of width.

- D. Water lawn areas adequately at time of sowing and daily thereafter, initially with fine spray, and continue throughout maintenance and protection period.
- E. Seed during approximate time periods of April 1 to May 15 and August 15 to October 1, and only when weather and soil conditions are suitable for such work, unless otherwise permitted.

3.03 MAINTENANCE OF SEEDED AREAS

- A. Maintain lawn areas and other seed areas at maximum height of 2-1/2 inches by mowing at least three times. Weed thoroughly once and maintained until time of final acceptance. Reseed and re-fertilize with original mixtures, watering or whatever is necessary to establish over entire area of lawn and other seeded areas a close stand of grasses specified, and reasonably free of weeds and undesirable coarse native grasses.
- B. Begin maintenance immediately after each portion of lawn is seeded and continue for minimum of 45 days.
- C. Repair or replace all seeded areas which, in judgment of Owner or Owner's Representative, have not survived and grown in satisfactory manner, for a period of one year after acceptance.
- D. Seeding replacement, same seed mixture as specified and furnished and installed as specified.

3.04 TEMPORARY COVER CROP

A. Sow a temporary cover crop of buckwheat, domestic rye grass or other acceptable seed if there is insufficient time in the planting season to complete seeding, fertilizing, and permanent seeding at the option of Contractor or order of Owner or Owner's Representative. Cut and water cover crop as necessary until the beginning of the following planting season, at which time it shall be plowed or harrowed into soil, the areas shall be fertilized and permanent seed crop sown as specified.

END OF SECTION

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SECTION 02950

LANDSCAPE PLANTINGS

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

- A. The work under this item consists of furnishing new plant material: planting, watering, mulching, staking and guying trees of the type and sizes indicated on the Plans, in accordance with these Specifications and/or as directed by the Owner's Representative or Owner.
- B. The principal work of this section includes, but may not be limited to, the following:
 - 1. Transplanting Operations
 - 2. Layout and Excavation of Plant Holes
 - 3. Planting and Backfilling
 - 4. Watering
 - 5. Pre-emergent Weed Control
 - 6. Mulching
 - 7. Fertilizing
 - 8. Tags and Labels
 - 9. Maintenance of trees and shrubs
 - 10. Plant Replacement Guarantee

1.02 REFERENCES

ANSI Z-60.1 - Nursery Stock, latest edition (American Association of Nurserymen, Inc.).

SPN: "Standardized Plant Names," latest edition, by the American Joint Committee on Horticultural Nomenclature.

AOAC: Association of Official Agricultural Chemist."

Pruning Standards: ANSI A300 Practices for Trees, Shrubs &Other Woody Plant Maintenance: Secretariat, National Arborist Association, P. O. Box 1094 Amherst, MA.

1.03 QUALITY ASSURANCE

- A. The Contractor shall Sub-contract planting work to a firm specializing in such work unless the Contractor is fully experienced and qualified. The Landscape Contractor shall have five years continuous experience and expertise in management, handling, and installation of ornamental plant material in large scale landscape construction projects. Site foreman shall have at least five years' experience and shall be onsite during all times of transplanting and plant installation.
- B. The Landscape Contractor shall be responsible to coordinate with plant material suppliers in sufficient time to ensure that all of the plants as specified in the contract plant list are available in sufficient quantity for installation.

- C. Do not make substitutions without written approval. If specified landscape material is not available, obtain approval for substitution from the Owner or Owner's Representative.
- D. The Owner's Representative reserves the right to inspect all plant materials for compliance with specifications, and to reject unsatisfactory or defective work at any time during progress of work.

1.04 SUBMITTALS

A. Certifications and/or labels of proposed plant materials or substitutions, listing common, scientific names and sizes of each.

1.05 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Protect all products from weather or other damaging or deteriorating conditions.
- B. Plants which have been damaged or have deteriorated in transit or storage are not acceptable.
- C. Keep plants moist, fresh, and protected against exposure to sun, wind, and freezing temperatures whether in the receiving yard, in transit, while being handled, or at the job site awaiting planting.
- D. Planting Window: Spring April 30 to June 30 Fall August 15 to October 15
- E. Those species known to be fall digging hazards shall be dug during the spring season only. Fall planting of these species shall be permitted only with certification, from the nursery, of the time of digging and at the discretion of the Owner's Representative.
- F. Correlate planting schedule with specified maintenance periods to provide maintenance to date of acceptance.
- G. Coordination with Lawns: Plant shrubs, and groundcover after final grades are established and prior to planting of lawns, unless otherwise acceptable to Owner's Representative. If planting of trees and shrubs occurs after lawn work, protect lawn areas and promptly repair damage to lawns resulting from planting operations.

1.06 SPECIAL CONDITIONS

A. Should discrepancies exist between plant quantities or plant sizes as shown in the Planting Schedule and on the Planting Plan, quantities and sizes shown on the Planting Plan shall govern. Contractor shall install all plants as shown on the plan at no additional cost to the Owner.

1.07 WARRANTY

- A. Provide a warranty for plant material for a minimum of one year including one continuous growing season. Commence warranty on date identified in the Certificate of Final Acceptance.
- B. Warranty: Include coverage of plants from death or unhealthy conditions.
- C. Replacements: Plants of same size and species as specified, planted as soon as possible in the next growing season, with a new warranty and an extended maintenance service commencing on date of replacement.

1.08 MAINTENANCE

- A. Maintenance of all plant material to be performed by installer includes:
 - Replacing of dead plant material
 - Resetting plants to proper grades, or to upright position

PART 2 - PRODUCTS

2.01 LOAM:

- A. Certified Clean, the Loam shall contain not less than 5 1/2 percent nor more than 10 percent organic matter as determined by the loss on ignition of oven-dried samples. The loam shall have an acidity range of 5.5 pH to 7.6 pH.
- B. Loam shall be free of debris and other extraneous matter. It shall be uncontaminated by salt water, foreign matter and substances harmful to plant growth. The electrical conductivity (EC2) of a 1:2 soil-water suspension shall be equal to or less than 1.0 milliohms/cm. (Test minus sieve #10 material). Soils shall not have levels of extractable aluminum greater than 200 parts per million.
- C. No loam shall be delivered to the site until the review and approval of loam test results by the Owner or Owner's Representative, but such approval shall not constitute final acceptance. The Owner or Owner's Representative will reject any material delivered to the site which, after on-site, post-delivery testing, does not meet these specifications.

2.02 ANTIDESSICANT

- A. Anti-desiccant shall be an emulsion which permits transpiration while retarding excessive loss of moisture from plants.
- B. Deliver in manufacturer's fully identified containers and mix according to manufacturer's direction. Use "Wiltproof" or approved equal.

2.03 FERTILIZER:

- A. Complete fertilizer in granular form, from commercial sources bearing manufacturer's analysis; 10-10-10 ratio of N-P-K.
- B. Significant quantities of trace elements such as iron, boron, etc. shall be contained in the fertilizer.

- C. Fifty percent (50%) of available nitrogen shall be in a slow release form as found in certain urea form products or natural organic forms or a combination of both.
- D. Salt index shall not exceed 35.

2.04 PRE-EMERGENT WEED CONTROL:

A. Pre-Emergent weed control for application in mulch areas shall be granular and have the active ingredient "Trifluralin 5.0%". All application rates and product use shall be in accordance with manufactures guidelines.

2.05 MULCH:

A. Pine Bark Mulch shall be derived from evergreen tree bark aged to a minimum of six months and no more than eighteen months. The bark shall be shredded so that the resulting pieces are no more than 1/2 inch thick and no longer than 3 inches. The mulch shall be ninety-eight percent (98%) organic matter with a pH of 3.5 to 4.5. The mulch shall be free of stringy material and shall not contain an excess of fine particles. The mulch shall be brown in color, free of leaves, twigs, sod, weeds, shavings and other foreign materials which are injurious to health plant growth.

2.06 WATER:

- A. Clean, fresh potable water free from injurious chemicals and other toxic substances harmful to plant life. No brackish water will be permitted.
- B. The Owner's Representative may reject any water delivered to the site which, after on-site, post-delivery testing, does not meet these specifications.

2.07 PLANT MATERIALS:

- A. Plant materials shall conform in size, grade and quality to the "American Association of Nurserymen Standards for Nursery Stock." As approved by the United States of America standards institute, in effect at the time of bidding.
- B. Plants of other kinds than those named in the Plant Schedule on the Drawings shall not be accepted without written approval of the Owner's Representative.
- C. Unless otherwise approved by Owner's Representative, all plants shall be nursery-grown in accordance with good horticultural practices and shall have been grown under climatic conditions similar to those in the locality of the project for at least two years. They shall have been transplanted or root pruned at least nine months previous to moving to the site.
- D. Plants shall be dug, handled and transported so as to prevent damage of any sort including but not limited to breakage of branches or limbs, scraped or bruised trunk or broken root ball. Plants shall be protected from desiccation during digging, storage and transportation by watering, covering and application of anti-desiccants as necessary to ensure their continued health and viability.
- E. All plant material shall comply with the state and federal law with respect to inspection for plant disease and insect infestation.

- F. Replacement plants larger in size than existing may be used if approved by the Owner's Representative provided use of larger plants does not increase Contract price.
- G. If use of larger plants is approved, increase ball of earth of spread of roots in proportion to size of plant.

PART 3 - EXECUTION

3.01 PLANTING OPERATIONS

- A. Layout: Determine location of underground utilities and layout plants so as to avoid possible damage to such structures. Plant shown graphically and/or verbally on plans, shall be staked on ground by contractor and approved by the Owner's Representative prior to excavation. Should discrepancies exist between plant quantities in Planting Schedule and Planting Plan, quantities shown on the Planting Plan shall govern. Adjustments in locations and outline shall be made as directed in field. Labor, equipment, and new smooth stakes are to be furnished by the Contractor for this purpose.
- B. Excavation: Planting locations shall conform to the approved staked locations and outlines. Holes dug for plantings shall in all cases be large enough to include the complete root system of the plant (tree, shrub, and groundcover) to be received and also sufficient amounts of approved backfill around the periphery of the root ball. All sod, weeds, roots, cobbles, and stones and other objectionable materials excavated from the plant holes, which is unsuitable for backfill shall be removed from the site immediately and legally disposed of.
- C. Plant Hole Size: The minimum plant hole size, unless otherwise specified, shown on the plans or directed by the Owner's Representative shall be as follows:
 - 1. Trees The planting hole shall be twice the diameter of the root ball in width and no deeper than 2 inches less than the distance from the bottom of the root ball to the root collar (i.e. a 12 inch tall ball will require a 10 inch deep hole). Any excavation in excess of that required shall be replaced and compacted to eighty-five percent (85%) of maximum density.
- D. Any rocks or underground obstructions shall be removed to a depth necessary for planting as specified, unless alternate locations for the planting are approved by the Owner or Owner's Representative. If removal of obstructions results in a deeper hole than specified for planting, backfill material shall be added and compacted to eighty-five percent (85%) of maximum density to the correct depth.
- E. Backfill Mix: Add loam to suitable soil excavated from the planting hole to create mix for planting pits. Backfill mix shall be at least thirty-three percent (33%) loam.

3.02 SETTING PLANTS

- A. Plants shall be handled in such a manner that the soil of the root ball will not be loosened from the roots. Carefully place plant into the prepared hole. Set plants plumb and fill in around the root ball to one-half the depth of the hole with backfill mix. Thoroughly tamp the backfill mix to eighty-five percent (85%) of maximum density.
- B. Fill remaining area of planting hole with water. Once the water has completely drained loosen burlap and peel down at least the top one-third. If required wire baskets to be cut off and removed. Roots that have been wrapped around the ball within the burlap shall be made to lay in as natural a manner as possible. Cut broken or frayed roots cleanly.
- C. Fill remaining area of hole with backfill mix and thoroughly tamp to eighty-five percent (85%) of maximum density. Form a saucer around the edge of through backfill hole by constructing a berm. The finish height of the compacted berm shall be 4 inches higher than the surrounding grade. No excess soil shall be allowed to remain within the plant saucer. Fill saucer with water.

3.03 PRUNING OF NEW PLANT MATERIAL

- A. After planting, prune only dead, broken or deformed branches and in such manner as to preserve natural character of plant.
- B. Perform all pruning with sharp tools, with cuts flush and clean. Do not apply paint or asphalt emulsion tree wound compound on cut area.
- C. Trees which have had their leaders cut, or so damaged that cutting is necessary, will not be accepted. There shall be no abrasion of bark, nor fresh cuts of limbs over ½ inch.

3.04 WATERING

- A. The plants shall be watered immediately following planting.
- B. Soak the plants thoroughly again within a twenty-four hour period after the initial planting.
- C. Additional watering shall be made at least once every three weeks, or as directed by the Owner or Owner's Representative based on weather conditions, until final acceptance of the plant material.

3.05 FERTILIZING

A. During backfill operations, place fertilizer in upper foot of back fill around perimeters at a rate of two ounces per foot of diameter of plant pit, or as recommended by manufacturer.

3.06 MULCHING PLANTS

A. Application of mulch should only occur after planting operations have been completed and initial watering has taken place. Mulch shall be applied no later than forty-eight hours after planting.

- B. Prior to the placement of mulch, the contractor shall apply a pre-emergent weed control with the entire area to be mulched. Pre-emergent weed control shall be applied by a commercial applicator, licensed by the State of Rhode Island at a rate in accordance with the manufacturer's instructions.
- C. Mulch shall be applied a minimum of 3 inches in depth for all individual trees and planting beds, as indicated graphically or verbally on the drawings.
- D. Where mulch abuts seeded lawn areas or other finish grade materials, edge of planting bed shall be cut smooth and cleanly. Mulch shall be placed carefully so as not to spill into adjacent areas. Any excess or spilled mulch shall be promptly removed from the project area. The cost of the mulch is incidental to new plantings.

3.10 ANTIDESSICANT SPRAYING

A. Spray anti-desiccants as directed by the manufacturer's recommendations if so directed by the Owner's Representative and or Owner.

3.11 TAGS AND LABELS

A. Leave all tree tag and label seals unbroken and visible on plant material until final inspection. Remove all seals immediately after final inspection.

3.12 MAINTENANCE

A. Contractor is responsible for protection and maintenance of all work prior to final acceptance. No plants will be accepted unless they show a healthy growth and satisfactory condition.

3.13 PLANT REPLACEMENT GUARANTEE

- A. Guarantee that, upon completion and final acceptance tree, shrub and groundcover planting conforms to requirements of contract documents and that all plants except transplant materials are healthy and will remain so for a period of one year. Such period shall commence with date of final acceptance.
- B. At any time within period of guarantee, Contractor shall replace any planting which for any reason, other than vandalism, has died or is in a dying condition, or which has failed to flourish in such a manner or to such a degree that its usefulness or appearance has been impaired.
- C. The Owner or Owner's Representative will not maintain plantings until after guarantee period. Contractor shall not have any claim that materials have failed to flourish as a result of Owner's Representative's maintenance operations, or lack of maintenance, and shall abide by terms stated herein for guarantee and replacement of plant materials.
- D. Decision of Owner's Representative as to necessity to replace any plant materials or repair any defects on workmanship, or cause of any destruction or loss, impairment or failure to flourish, shall be conclusive and binding upon Contractor. Replacements shall be of same species and size as specified on Plant List. All plant replacements shall be inspected, sealed, furnished, planted and mulched as specified herein at Contractor's expense.
- E. "Vandalism," is intended to mean any acts, whether intentional or accidental, by other persons occurring following final acceptance, which clearly result in breakage or other damage to individual plants or plant

beds, and which may reasonable be considered to be beyond Contractor's reasonable control, as determined by the Owner's Representative.

END OF SECTION

SECTION 03100

CONCRETE FORMWORK

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes

1. Requirements for forms to be used for all concrete masonry including concrete slabs, pathways and footings, except as otherwise permitted.

B. Related Sections

- 1. Section 03200 Concrete Reinforcement.
- 2. Section 03300 Cast-In-Place Concrete.

1.02 REFERENCES

- A. American Concrete Institute (ACI)
 - 1. ACI 318, Building Code Requirements for Structural Concrete.
 - 2. ACI 347R, Guide to Formwork for Concrete.

1.03 SUBMITTALS

- A. Submit in accordance with Section 01300.
- B. Shop Drawings:
 - 1. Layout of panel joints, tie hole pattern, and form liners.
 - 2. Form Ties Tapered Through-Bolts: Proposed method of sealing form tie hole; coordinate with details shown.
- C. Samples: One each as follows:
 - 1. Form liners.
 - 2. Form ties.
- D. Quality Control Submittals:
 - 1. Statements of qualifications for formwork designer.
 - 2. Manufacturer's Certificate of Proper Installation. (After installation)

1.04 QUALITY ASSURANCE

A. Qualifications: Formwork, falsework, and shoring designs prepared by an engineer licensed in the State of Rhode Island.

PART 2 PRODUCTS

2.01 FORM MATERIALS

- A. Forms shall be made of wood, metal, or other acceptable material. Wooden forms shall be constructed of sound lumber or plywood of suitable dimensions, free from knotholes and loose knots. Plywood shall be reasonable good, as accepted. Metal forms shall be of an acceptable type for the work involved. Edges of forms in contact with concrete shall be flush within 1/16 in.
- B. Forms shall be of suitable material, design, and construction as to be rigid, tight enough to prevent the passage of mortar, and plane surfaces shall be plane within 1/16 in. in 4 ft. Particular care shall be taken to ensure that forms are true to line where deviations in the concrete would be obvious or objectionable, as where building superstructures are to be built thereon, or where the tops of walls are exposed. All such deviations which may occur shall be corrected by, and at the expense of the contractor, as directed, even to the extent of tearing down and rebuilding the concrete.
- C. Forms shall be sufficiently rigid to prevent displacement or sagging between supports, and so constructed that the concrete will not be damaged by their removal. The Contractor shall be entirely responsible for their adequacy.
- D. All Other Forms: Materials as specified for wall forms.

E. Form Sealer:

- 1. Material: Surface sealer will not bond with, stain, or adversely affect concrete surfaces, and will not impair subsequent treatments of concrete surfaces, when applied to most forms of form liners. A ready-to-use water based material formulated to reduce or eliminate surface imperfections, containing no mineral oil or organic solvents. Environmentally safe, meeting local, state, and federal regulations and can be used in clean water treatment plants.
- 2. Manufacturer and Product: Master Builders, Inc.; Rheofinish; or Equal.
- F. Rustication Grooves and Beveled Edge Corner Strips: Nonabsorbent material, compatible with form surface, fully sealed on all sides prohibiting loss of paste or water between the two surfaces. Match the rustication grooves with the existing configuration and style located at the plant.

2.02 FORM TIES

- A. Form ties to be encased in concrete shall not be made of through-bolts or commonwire, but shall be of a well-established type, so made and installed as to embody the following features:
 - 1. After removal of the protruding part of the tie, there shall be no metal nearer than 1 in. to the face of the concrete.
 - 2. The part of the tie which is to be removed shall be at least 1/2 in. in diameter, or if smaller, it shall be provided with a wood or metal cone 1 in. long placed against the inside of the forms. cones shall be carefully removed from the concrete after the forms have been striped.
 - 3. Ties which pass through walls subject to hydrostatic pressure shall be provided

with acceptable water stops, such as washers, securely fastened to the ties.

B. Form Ties:

- 1. Material: Steel.
- 2. Spreader Inserts.
 - a. Conical or spherical type.
 - b. Design to maintain positive contact with forming material.
 - c. Furnish units that will leave no metal closer than 1 inch to concrete surface when forms, inserts, and tie ends are removed.
- 3. Wire ties not permitted.
- 4. Flat bar ties for panel forms, furnish plastic or rubber inserts with minimum 1 inch depth and sufficient dimensions to permit patching of tie hole.
- 5. Water Stop Ties: For water-holding structures, basements, pipe galleries, and accessible spaces below finish grade, furnish one of the following:
 - a. Integral steel water stop 0.103-inch thick and 0.625 inch in diameter tightly and continuously welded to tie.
 - b. Neoprene water stop 3/16-inch thick and 15/16 inch in diameter whose center hole is 1/2 diameter of tie, or a molded plastic water stop of comparable size.
 - c. Water Stop: Oriented perpendicular to tie and symmetrical about center of tie.
 - d. Design ties to prevent rotation or disturbance of center portion of tie during removal of ends and to prevent water leaking along tie.
- 6. Through-Bolts: Tapered minimum 1-inch diameter at smallest end.
- 7. Elastic Vinyl Plug: Design and size of plug to allow insertion with tool to enable plug to elongate and return to original length, and diameter upon removal forming a watertight seal.
 - a. Manufacturer and Product: Dayton Superior Co., Miamisburg, OH; Dayton Sure Plug, or equal.

PART 3 EXECUTION

3.01 SYSTEM DESIGN REQUIREMENTS

- A. Design formwork in accordance with ACI 347R and ACI 318 to provide the concrete finishes specified in Section 03300, CAST-IN-PLACE CONCRETE.
- B. Make joints in forms watertight.
- C. Limit panel deflection to 1/360 of each component span to achieve tolerances specified.

3.02 ERECTION

- A. General: Unless specified otherwise, follow the applicable recommendations of ACI347R.
- B. Forms shall be so constructed and placed that the resulting concrete will be of the shape, lines, dimensions, and to the elevations indicated on the drawings or specified, and exposed concrete will be substantially free from board or grain marks, poorly matched joints, and other irregularities or defects.

- C. Beveled Edges (Chamfer):
 - 1. Form 3/4-inch bevels at concrete edges, unless otherwise shown.
 - 2. Where beveled edges on existing adjacent structures are other than 3/4-inch, obtain Owner or Owner's Representative's approval of size prior to placement of beveled edge.
- D. Forms for Concrete Slabs and Concrete Pavement:
 - 1. Provide standard steel or wood forms to prevent movement.
 - 2. Set forms to true lines and grades, and securely stake in position.
- E. Form Tolerances: Provide forms in accordance with ACI 347R and ACI 318 and the following tolerances for finishes specified:
 - 1. Slab Tolerances:
 - a. Exposed Slab Surfaces: Comprise of flat planes as required within tolerances specified.
 - b. Slab Finish Tolerances and Slope Tolerances: Crowns on floor surface not too high as to prevent 10-foot straight edge from resting on end blocks, nor low spots that allow a block of twice the tolerance in thickness to pass under the supported 10foot straightedge.
 - c. Steel gauge block 5/16-inch thick.
 - d. Slab drainage.
 - 1) Finish Slab Elevation: Slope slabs to floor drain and gutter, and shall adequately drain regardless of tolerances.
 - 2) Thickness: Maximum 1/4-inch minus or 1/2-inch plus from thickness shown, except where thickness tolerance will not affect slope, drainage, or slab elevation.

3.03 FORM SURFACE PREPARATION

- A. Thoroughly clean form surfaces in contact with concrete or previous concrete, dirt,
- B. Exposed Wood Forms in Contact with Concrete: Apply form sealer as recommended by the sealer material manufacturer.
- C. Steel Forms: Apply form sealer to steel forms as soon as they are cleaned to prevent discoloration of concrete from rust.

3.04 FORM COATINGS

A. All forms shall be oiled with an acceptable nonstaining oil or liquid form coating before reinforcement is placed.

B. Before form material is reused, all surfaces that are in contact with the concrete shall be thoroughly cleaned, all damaged pieces repaired, and all projecting nails withdrawn.

3.05 REMOVAL OF FORMS

- A. Except as otherwise specifically authorized by the Owner or Owner's Representative. forms shall not be removed until the concrete has aged for the following number of day-degrees*:
 - 1. Formwork not supporting weight of concrete, (i.e., sides of beams, walls, columns, and similar parts of the Work) may be removed after cumulatively curing at not less than a total of three 50-degree F days after placing concrete, provided concrete is sufficiently hard to not be damaged by form-removal operations, and provided curing protection operations are maintained.
 - 2. Leave forms and shoring for elevated structural slabs or beams in place, in accordance with ACI 318, Chapter 6, and until concrete has reached compressive strength equal to 80 percent of the specified 28-day compressive strength as determined by test cylinders.
 - 3. *Day-degree: total number of days times average daily air temperature at surface of concrete. For example, 5 days at a daily average temperature of 60 deg. F. equals 300 day-degrees.

3.06 MANUFACTURER'S SERVICES

A. Provide form manufacturer's representative at site for installation assistance, and inspection.

END OF SECTION

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SECTION 03200

CONCRETE REINFORCEMENT

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes

1. Requirements for reinforcing steel bars, wire fabric and accessories as shown on the drawings, specified herein, and as needed for a complete and proper installation.

B. Related Sections

- 1. Section 03100 Concrete Formwork.
- 2. Section 03300 Cast-In-Place Concrete.

1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM).
 - 1. A82, Specification for Steel Wire, Plain for Concrete Reinforcement.
 - 2. A185, Specification for Steel Welded Wire Fabric, Plain, for Concrete Reinforcement.
 - 3. A497, Specification for Steel Welded Wire Fabric, Deformed, for Concrete Reinforcement.
 - 4. A615, Specification for Deformed and Plain Billet Steel Bars for Concrete Reinforcement.
 - 5. A706, Specification for Low-Alloy Steel Deformed Bars for Concrete Reinforcement.
 - 6. A775, Specification for Epoxy-Coated Reinforcing Steel Bars.
- B. American Concrete Institute (ACI).
 - 1. ACI 318, Building Code Requirements for Structural Concrete.

1.03 SUBMITTALS

A. In accordance with Section 01300 submit cutting and bending drawings and schedules for all reinforcement to be furnished.

B. Shop Drawings:

- 1. Prepare in accordance with Concrete Reinforcing Steel Institute (CRSI) Manual of Standard Practice and ACI SP-66 Detailing Manual:
 - a. Bending lists.
 - b. Placing drawings.
- 2. Welded splice, Cadweld splice, and mechanical threaded splice.

C. Quality Control Submittals:

- 1. Lab test reports for reinforcing steel showing stress-strain curves and ultimate strengths.
- 2. Mechanical Threaded Connections:

- a. Current International Conference of Building Officials (ICBO) Research Report or equivalent code agency report listing findings to include acceptance, special inspection requirements, and restrictions.
- b. Manufacturer's instructions.
- c. Verification that device threads have been checked and meet all requirements for thread quality, in accordance with manufacturer's published methods.
- 3. Epoxy-Coated Reinforcing Bars: Written certification in accordance with paragraph 4.2.1 of ASTM A775.
- 4. Welding Qualification: Prior to welding, submit welder qualifications and radiographic nondestructive testing procedures.

1.04 QUALITY ASSURANCE

- A. The steel shall be newly rolled stock substantially free from mill scale, rust, dirt, oil, grease, or other foreign matter. Bars shall be of billet steel and, unless otherwise indicated, shall be Grade 60 bars.
- B. Billet steel bars shall conform to ASTM A 615.
- C. All bars shall be rolled by an acceptable mill. The Contractor shall submit at his own expense certified copies of tests of the bars furnished. The tests shall be as specified in the appropriate ASTM Specification referred to above and shall be made by an acceptable laboratory.
- D. Welder Qualifications: Certified in accordance with AWS D1.4-79.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Unload, store, and handle bars in accordance with CRSI publication "Placing Reinforcing Bars."

B. Coated Bars:

- 1. Protect epoxy-coated bars contact areas from handling equipment.
- 2. Lift bundles of coated bars at multiple pickup points to minimize bar-to-bar abrasion from sags in bundles.
- 3. Do not drop or drag coated bars or bundles of coated bars.
- 4. Store coated bars on protective cribbing.
- 5. Color fading of coating is not cause for rejection of epoxy-coated reinforcing bars.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Deformed Billet-Steel Reinforcing Bars:
 - 1. Includes stirrups, ties, and spirals.
 - 2. ASTM A615, Grade 60, including Supplemental Requirements S1 where welding is not required.

3. ASTM A706, Grade 60, including Supplemental Requirements for reinforcing to be welded.

B. Splices and Mechanical Connections:

- 1. Metal Sleeve: Furnish with cast filler metal, capable of developing, in tension or compression, 125 percent of minimum tensile strength of the bar.
- 2. Mechanical Threaded Connections: Furnish metal coupling sleeve for splicing reinforcing in secondary members or in areas of low stress with internal threads engaging threaded ends of bars developing in tension or compression 125 percent of yield strength of bar.
 - a. Manufacturers and Products:
 - 1) Erico Products, Inc., Cleveland, OH; Lenton Reinforcing Steel Couplers.
 - 2) Richmond Screw Anchor Co., Inc. Fort Worth, TX; Richmond DB-SAE Dowel Bar Splicers.
 - 3) Or equal.
- C. Epoxy-Coated Reinforcing Bars: ASTM A775, deformed bars, with bond strength not less than 80 percent of uncoated bars.

D. Welded Wire Fabric:

- 1. ASTM A185, or A497, and ACI 318/318R, using ASTM A82, wire of 75 ksi minimum tensile strength.
- 2. Furnish flat sheets only, rolled sheets not permitted.
- E. Reinforcement shall be accurately formed to the dimensions indicated on the drawings. Stirrups and tie bars shall be bent around a pin having a diameter not less than two times the minimum thickness of the bar. Bends for other bars shall be made around a pin having a diameter not less than six times the minimum thickness except for bars larger than 1 in., in which case the bends shall be made around a pin of eight bar diameters. All bars shall be bent cold.
- F. Bars shall be shipped to the work with bars of the same size and shape fastened in bundles with securely wired-on metal identification tags giving size and mark.
- G. Deformations on bars for concrete reinforcement shall conform to the requirements of the above-mentioned ASTM Specifications.

2.02 ACCESSORY MATERIALS

A. Tie Wire:

- 1. Black, soft-annealed 16-gauge wire.
- 2. Nylon-, epoxy-, or plastic-coated wire.

B. Bar Supports and Spacers:

- 1. Precast concrete bar supports, cementitious fiber-reinforced bar supports, or all-plastic bar supports and side form spacers meeting the requirements of CRSI Manual of Standard Practice. Do not use other types of supports or spacers.
- 2. In Beams, Columns, Walls, and Slabs Exposed to View After Stripping: Small rectangular concrete blocks made up of same color and strength as concrete being placed around them or all-plastic bar supports and side form spacers.

- 3. Use supports made of dielectric material for epoxy-coated reinforcing bars supported from formwork.
- 4. If epoxy-coated reinforcing is used, furnish epoxy-coated reinforcing bars for spreader bars.
- 5. Precast concrete supports of same strength as concrete for reinforcing in concrete place don grade.
- C. Welded steel wire fabric shall conform to the ASTM A 185. The gage and spacing of wires shall be as indicated on the drawings.
- D. Soffit Clips: Made galvanized steel wire not lighter than No. 12 Stl. W.C. They shall be shared so that the greater portion of the wire is held about 1 in. from the flange of the steel beam, and shall be spaced not less than 9 in. on centers, the spacing being maintained by suitable longitudinal wires.

2.03 FABRICATION

- A. Follow CRSI Manual of Standard Practice.
- B. Bend all bars cold.

PART 3 EXECUTION

3.01 PREPARATION

- A. Notify Owner or Owner's Representative when reinforcing is ready for inspection and allow sufficient time for inspection prior to placing concrete.
- B. Repair epoxy coating damaged due to handling, shipment, and placing. Repair with patching material in accordance with ASTM A775, and manufacturer's recommendations.
- C. Clean metal reinforcement of loose mill scale, oil, earth, and other contaminants.
- D. Coat wire projecting from precast concrete bar supports with dielectric material, epoxy, or plastic.
- E. Before being placed in position, reinforcement shall be thoroughly cleaned of loose mill and rust scale, dirt, and other coatings, including ice, that tend to interfere with development of proper bond. Where there is delay in depositing concrete after reinforcement is in place, bars shall be reinspected and cleaned when necessary.
- F. Reinforcement which is to be exposed for a considerable length of time after having been placed shall be painted with a heavy coat of cement grout, if required.

3.02 Reinforcing Bar Installation

A. Bundle or space bars, instead of bending where construction access through reinforcing is necessary.

- B. Spacing and Positioning: Conform to ACI 318/318R.
- C. Location Tolerances: In accordance with CRSI publication, "Placing Reinforcing Bars".

D. Splicing:

- 1. Follow ACI 318/318R.
- 2. Use lap splices unless otherwise shown or permitted in writing by Owner or Owner's Representative.
- 3. Welded Splices: Accomplish by full penetration groove welds and develop at least 125 percent of yield strength of bar.
- 4. Stagger splices in adjacent bars.
- 5. Metal sleeves may be used.

E. Mechanical Splices and Connections:

- 1. Use only in areas specifically approved in writing by the Owner or Owner's Representative.
- 2. Install as required by manufacturer with threads tightened and in accordance with ICBO Research Report.
- 3. Maintain minimum edge distance and concrete cover.

F. Tying Deformed Reinforcing Bars:

- 1. Tie every other intersection on mats made up of Nos. 3, 4, 5, and 6 bars to hold them firmly at required spacing.
- 2. Bend all noncoated tie write to prevent tie wire from being closer than 1 inch from the surface of concrete.
- 3. Epoxy-Coated Bars:
 - a. Use epoxy-coated or nonmetallic clips.
 - b. Repair coating damage at clipped or welded intersection.
- G. Reinforcement Around Openings: Place an equivalent area of steel bars or fabric around pipe or opening and extend as shown, on each side sufficiently to develop bond with each bar. See drawing details.

H. Welding Reinforcement:

- 1. Only A706/A706M bars may be welded.
- 2. Do not perform welding until welder qualifications are approved.
- 3. Provide suitable ventilation when welding epoxy-coated reinforcing bars.
- 4. After completion of welding on epoxy-coated reinforcing bars, repair coating damage, welds, and steel splice members with same material as used for repair of coating damage.
- I. Straightening and Rebending: Field bending of reinforcing steel bars is not permitted.
- J. Unless permitted by Owner or Owner's Representative, do not cut reinforcing bars in the field. When epoxy-coated reinforcing bars are cut in the field, coat ends of bars with same material used for repair of coating damage.
- K. Reinforcement shall be accurately positioned as indicated on the drawings, and secured against displacement by using annealed iron wire ties or suitable clips at intersections. Concrete blocks having a minimum bearing area of 2 in. by 2 in., and equal in quality to that

specified for the slab, shall be used for supporting reinforcing bars for slabs on grade. Where the underside of slabs will be exposed to view in the finished work, stainless-steel supports shall be used

L. Furnish and place all concrete reinforcement as indicated on the drawings and as herein specified. Concrete reinforcement in sizes No. 3 (3/8 in.) and larger shall be deformed steel bars of the shapes and sizes indicated on the drawings.

3.03 WELDED WIRE FABRIC INSTALLATION

- A. Extend fabric to within 2 inches of edges of slab, and lap splices at least 1-1/2 courses of fabric or minimum 8 inches.
- B. Tie laps and splices securely at ends and at least every 24 inches with tie wire.
- C. Place welded wire fabric on concrete blocks at correct distance as shown, above bottom of slab and rigidly support equal to that provide for reinforced bars. Do not use broken concrete, brick, or stone.
- D. Follow ACI 318/318R and current Manual of Standard Practice, Welded Wire Fabric.
- E. Do not use fabric that has been rolled. Install flat sheets only.

3.04 TESTS AND INSPECTION

- A. Test 10 percent of all welds using radiographic, nondestructive testing procedures referenced in AWS D1.4-79.
- B. Inspect each splice and verify each component is in accordance with manufacturer's instructions and ICBO Research Report.

END OF SECTION

SECTION 03300

CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Requirements for furnishing and installing forms, reinforcing steel, concrete and expansion and/or construction joints

1.02 REFERENCES

- A. This specification makes reference to the requirements of additional specifications as listed. The Contractor shall familiarize themselves with all requirements reference by this specification.
 - 1. State of Rhode Island Department of Transportation (RIDOT) Standard Specifications, 2004 Edition with latest addenda.
 - 2. American Society for Testing and Materials (ASTM)
 - a. A185, Specification for Steel Welded Wire Fabric, Plain, for Concrete Reinforcement.
 - b. A615, Specification for deformed and Plain Billet-Steel Bars for Concrete Reinforcement.
 - c. C31, Practice for Making and Curing Concrete Test Cylinders in the Field.
 - d. C33, Specification for Concrete Aggregates.
 - e. C39, Test Method for Compressive Strength of Cylindrical Concrete Specimens.
 - f. C42, Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete.
 - g. C94, Specification for ready Mixed Concrete.
 - h. C143, Test Method for Slump of Hydraulic Cement Concrete.
 - i. C150, Specification for Portland Cement.
 - j. C172, Practice for Sampling Freshly Mixed Concrete.
 - k. C231, Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method.
 - 1. C260, Test Method for Air-Entraining Admixtures for Concrete.
 - m. C494, Specification for Chemical Admixtures for Concrete.
 - n. C920, Specification for Elastomeric Joint sealants.
 - o. D994, Specification for Preformed Expansion Joint Filler for Concrete (Bituminous Type)
 - p. D1056, Specification for Flexible Cellular Materials-Sponge or Expanded Rubber.
 - q. D1751, Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).

- 3. American Concrete Institute (ACI):
 - a. ACI 301, Specification for Structural Concrete for Buildings.
 - b. ACI 304, Recommended Practice for Measuring, Mixing, Transporting, and Placing Concrete.
 - c. ACI 305, Recommended Practice for Hot Weather Concreting.
 - d. ACI 306, Recommended Practice for Cold Weather Concreting.
 - e. ACI 315, Building Code Requirements for Reinforced Concrete.
 - f. ACI 347, Guide to Formwork for Concrete.
- 4. Concrete Reinforcing Steel Institute (CRSI):
 - a. Manual of Standard Practice.

1.03 SUBMITTALS

- A. Submit Shop Drawings in accordance with SECTION 01300 for the following:
 - 1. Reinforcing Steel
 - a. Furnish in detail and completeness that all fabrication and placement at the site can be accomplished without the use of contract drawings for reference.
 - b. Include number of pieces, sizes, and grade of reinforcing steel, accessories, and any other information required for fabrication and placement.
 - c. Show joint layout and design
 - d. Check structural and site drawings for anchor bolts, anchors, inserts, conduits, sleeves, and any other items which are required to be embedded in concrete, and make necessary provisions as required so that reinforcing steel will not interfere with the placement of such embedded items.
 - 2. Concrete mix designs.
 - 3. Grout manufacturer/design mix (if included in this section)
 - 4. Manufacturer's data for ancillary materials such as joint fillers and sealants, epoxy bonding compound.

1.04 QUALITY ASSURANCE

- A. Sample and Test Concrete as follows:
 - 1. Slump: A slump test shall be made for each truckload of concrete in accordance with ASTM C143. Slumps greater than design mix limit will be grounds for rejection of the concrete.

1.05 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Reinforcing steel

- 1. Transport to the site, store, and cover in a manner which will ensure that no damage shall occur to it from moisture, dirt, grease, or any other cause that might impair bond to concrete or chip protective epoxy coating.
- 2. Store on the site at all times, a supply of approved reinforcing steel to ensure that there will be no delay of the work.
- 3. Identification of steel shall be maintained after bundles are broken.

PART 2 PRODUCTS

2.01 MATERIALS

A. Portland Cement

- 1. Shall conform with the State of Rhode Island Department of Transportation (RIDOT) Standard Specifications, 2004 Edition with latest addenda.
- 2. Only one brand of cement shall be used on the project.

B. Aggregates

- 1. Fine aggregate, in accordance with ASTM C33, clean and graded from 1/4 inch to fines.
- 2. Coarse aggregate, in accordance with ASTM C33, clean and graded from 1/4 inch to maximum sizes hereinafter specified.

C. Air Entraining Agent

1. In accordance with ASTM C260.

D. Water Reducing Agent

1. In accordance with ASTM C494 Type A.

E. Microsilica Admixture

1. Packaged in easily dispersing form.

F. Water

- 1. Clean and potable,
- 2. Free of impurities detrimental to concrete.

G. Reinforcing Bars

1. New, deformed billet steel bars, in accordance with ASTM A615, Grade 60.

H. Welded Wire Fabric

1. In accordance with ASTM A185.

I. Accessories

- 1. Reinforcement accessories, consisting of spacers, chairs, ties, and similar items shall be provided as required for spacing, assembling, and supporting reinforcement in place.
- 2. All accessories shall be dielectric coated steel or approved plastic accessories, conforming to the applicable requirements of the CRSI Standards.

J. Tie wire.

1. 16 gauge or heavier black annealed wire.

K. Form Ties and Spreaders

- 1. Standard metal form clamp assemble and plastic cone, of type acting as spreaders and leaving no metal within 1 inch of concrete face.
- 2. Provide form tie with water stop for all walls to be in contact with earth or liquid.
- 3. Inner tie rod shall be left in concrete when forms are removed.
- 4. No wire ties or wood spreaders will be permitted. Use ½" x 1" C.T. plastic cones for sinkages.

L. Form Coatings

- 1. Non-grain raising and non-staining type that will not leave residual matter on surface of concrete or adversely affect proper bonding of subsequent application of other material applied to concrete surface.
- 2. "Nox-Crete Form Coating" as manufactured by Nox-Crete Company, or approved equal.
- 3. Coatings containing mineral oils or the non-drying ingredients will not be permitted.

M. Grout

- 1. High-strength, non-shrink grout with saltwater resistance.
- 2. Five Star Special Grout 120 or equivalent.

2.02 CONCRETE STRENGTHS AND PROPORTIONS

- A. Cast-in-place concrete shall have the minimum compressive strength at 28 days as indicated on the Drawings.
- B. The exact proportions for the mix, including amounts admixture (if any), and water, shall be determined by the concrete supplier.
- C. The proportions of aggregate to cement for any concrete shall be such as to produce a mixture which will work readily into the corners and angles of the forms and around reinforcement with the method of placing employed not he work, but without permitting the materials to segregate or excess free water to collect on the surface.
- D. Air-Entrainment: The air content in all concrete shall be maintained at 5 to 7 percent.

2.03 PREMOLDED JOINT FILLER

- A. Bituminous Type.
 - 1. In accordance with ASTM D994 or D1751.
- B. Sponge Rubber Type.
 - 1. Neoprene, closed-cell, expanded in accordance with ASTM D1056, Type 2C5, with a compression deflection, 25 percent deflection (limits), 17 to 24 psi (119 to 168 kPa) minimum.

2.04 POURABLE JOINT FILLERS

- A. Filler for Nonpotable Water Structures
 - 1. Specific Gravity: Greater than 1.0 for cured, in-place filler.
 - 2. Vertical and Sloped Joints: Furnish gun grade material that will remain as placed in joints and will not run down slope.
 - 3. Suitable for continuous immersion and exposure to liquid being contained in the structure.

2.05 JOINT SEALANTS

- A. In slabs.
 - 1. In accordance with ASTM C920 for poured 2-component polyurethane sealant.
 - 2. Sikaflex-2c, as manufactured by Sika Corporation or approved equivalent.
- B. In walls.
 - Type II, Class A, compound conforming to Interim Federal Specification TT-S-00227E
 (3) (COM-NBS) for Sealing Compound; Elastomeric Type, Multi-Component (for Caulking, Sealing, and Glazing in Buildings and Other Structures).
 - 2. Sikaflex-1a, as manufactured by Sika Corporation or approved equivalent.

2.06 EPOXY BONDING COMPOUND

A. The epoxy bonding compound shall be a three-component, solvent-free, moisture-tolerant, epoxy modified, cementitious product specifically formulated as a bonding agent and anti-corrosion coating. The product shall have suitable contact time, fluidity, and application temperature for this type of application.

PART 3 EXECUTION

3.01 FORMWORK

- A. Falsework for Forms
 - 1. Build and maintain necessary false work for the forms.
- B. Construction of Forms
 - 1. General
 - a. Construct in accordance with ACI 347.

b. Construct of sound material, to the correct shape and dimensions, mortar tight, of sufficient strength, and so braced and tied together that the movement of men, equipment, materials, or placing and vibrating the concrete will not throw them out of line or position.

2. Embedded Items

- a. Make provisions for pipes, sleeves, anchors, inserts, reglets, anchor slots, nailers, water stops, and other features.
- b. Do not embed wood, other than necessary nailing blocks, in concrete.
- c. Extended complete cooperation to suppliers of embedded items in their installation.
- d. Secure information for embedded items from other trades as required.
- e. Securely anchored embedded items in correct location and alignment prior to placing concrete.

3. Openings for Items Passing Through Concrete

- a. Establish exact locations, sizes, and other conditions required for openings and attachment of work specified under other sections.
- b. Coordination work of this nature in order that there will be no unnecessary cutting and patching of concrete.
- c. Cutting and repairing of concrete as a result of failure to provide for such openings shall be paid for by the Contractor at no additional expense to the Owner.

C. Removing Forms and False work

- 1. Forms shall not be removed for at least 72 hours after concrete has been placed.
- 2. Forms shall not be removed until the concrete has attained sufficient strength to insure stability.

3.02 REINFORCING STEEL

A. General

- 1. Place reinforcing steel in accordance with the drawings and approved shop drawings and the applicable requirements of the CRSI, Manual of Practice.
- 2. Install reinforcement accurately and secure against movement, particularly under the weight of workmen and the placement of concrete.

B. Reinforcing Steel Supports

- 1. Support bars on approved plastic or dielectric-coated metal chairs or spacers, accurately placed and securely fastened to forms or steel reinforcement in place.
- 2. Supply additional bars, whether specifically shown on the drawings or not, where necessary to securely fasten reinforcement in place.
- 3. Support legs of accessories in forms without embedding in form surface.
- 4. Spacing of chairs and accessories shall conform to CRSI, Manual of Standard Practice. Accurately space hoops and stirrups and wire to the reinforcement.
- 5. Permit no lose wood inside forms.
- 6. Lifting of welded wire fabric into proper position while concrete is being poured rather than supporting fabric on chairs will not be permitted.

C. Placing and Tying

1. Set in place, space, and rigidly and securely tie or wire with tie wire at all splices and at all crossing points and intersections in the positions shown, or as directed.

- 2. Rebending of bars on the job to accommodate the job to accommodate existing conditions will not be permitted without the written approval of the Owner or Owner's Representative.
- 3. Points ends of wire ties away from forms.

D. Spacing

1. Minimum center to center distance between parallel bars shall be in accordance with the details on the drawings, or, where not shown, the clear spacing shall be 2 times the bar diameter but in no case less than 1½ inches or less than 1½ times the maximum size aggregate.

E. Splices

- 1. Maximum 50% of steel spliced occurring within lap length.
- 2. Top bars shall be 1.3 times values given in 3.01.D.5.c.
- 3. Splice lengths.

a. #6 bars and smaller: 50-bar diameterb. #7 bars and larger: 60-bar diameter

F. Concrete Covering

1. In accordance with ACI 315, except where shown otherwise on drawings.

3.03 CONCRETE

A. Mixing of Concrete

- All concrete shall be ready-mixed concrete and shall be mixed and delivered in accordance with ASTM C 94. The batch plant of the concrete producer shall be certified for compliance with the standards established by the National Ready-Mixed Concrete Association.
- 2. In the event concrete is mixed at a central batching plant, the delivery shall be arranged so that intervals between batches are kept to a minimum, and in any event not more than thirty (30) minutes. Trucks shall be in first class condition and kept in constant rotation during delivery.
- 3. Concrete shall be placed within 90 minutes after cement has been mixed with aggregate or 45 minutes after addition of water and admixtures.
- 4. No admixtures, except those mentioned in paragraph 2.1 shall be used. Calcium chloride will not be permitted.
- 5. Truck delivery slips of all concrete delivered to the job shall indicate the quantity and quality of concrete, additives, date and time of batching and delivery, and the location of placement. Delivery slips shall be forwarded to the Owner or Owner's Representative at the end of each pour.

B. Cold Weather Concreting.

- 1. In accordance with ACI 306.
- 2. Concrete shall not be mixed or placed when the temperature is below 40 degrees F, or when conditions indicate that the temperature will fall below 40 degrees F within 72 hours unless precautions are taken to protect the concrete.
- 3. Concrete temperature shall be maintained, when deposited, at not less than 60 degrees F. Reinforcement, forms, and ground which concrete will contact must be completely free of frost.

- 4. Concrete and formwork must be kept at a temperature of not less than 50 degrees F. for not less than 96 hours after placing.
- 5. Calcium chloride shall not be used.

C. Hot Weather Concreting.

- 1. In accordance with ACI 305.
- 2. The maximum temperature of the concrete, when deposited, shall be 85 degrees F. If the weather causes the placing temperature to exceed 85 degrees F., the mix shall be cooled by methods approved by the Owner or Owner's Representative.
- 3. No concrete shall be deposited when the air temperature is greater than 90 degrees F.

D. Conveying and Placing Concrete.

- 1. In accordance with ACI 304.
- 2. Notification: Before placing concrete, forms shall be thoroughly inspected. All chips, dirt, etc., shall be removed, all temporary bracing and cleats taken out, all openings for pipes, etc., properly boxed, all forms properly secured in their correct position and made tight, all reinforcement, anchors, and embedded items secured in their proper places. Concrete which may be on the forms or reinforcement, and which is set and dry, shall be cleaned off, and the forms and steel washed off before proceeding. Remove all foreign matter from forms and excavations.
- 3. Water shall be removed from place of deposit before concrete is placed unless otherwise permitted by the Owner or Owner's Representative. Any flow of water into an excavation shall be diverted through proper side drains into a sump or shall be removed by other approved methods which will avoid washing away the freshly deposited concrete.
- 4. Soil on which concrete will be poured shall be thoroughly wetted (except in freezing weather).
- 5. Anchors and Embedded Items: Anchors, bolts, sleeves, inserts, wood blocking, and any other items to be embedded in concrete shall be accurately secured in position before the concrete is placed. Aluminum shall not be embedded in concrete.

E. Handling and Depositing

- a. Before any concrete is placed, notify all whose work is in any way connected with or influenced by the concrete work, and give them reasonable time to complete all portions of their work that must be completed before concrete is deposited.
- b. Immediately before concrete is placed, inspect all forms to ensure that they are in proper position, sufficiently rigid, thoroughly clean, properly oiled and free from foreign materials, and that all reinforcement is in proper position.
- c. Concreting, once started, shall be carried on as a continuous operation until the section of approved size and shape is completed.
- d. Concrete shall be conveyed as rapidly as practicable from the mixer to the place of final deposit by methods that prevent the separation or loss of ingredients. It shall be deposited, as nearly as practicable, in its final position to avoid rehandling or flowing.
- e. Concrete shall not be dropped freely where reinforcement will cause segregation, nor shall it be dropped freely more than six (6) feet. Concrete shall be deposited to maintain a plastic surface approximately horizontal.
- f. Concrete that has partially hardened shall not be deposited in the work.

F. Pumping

- a. Concrete may be placed by pumping if first approved in writing by the Owner or Owner's Representative for the location proposed.
- b. Equipment for pumping shall be of such size and design as to ensure a practically continuous flow of concrete at the delivery end without separation of materials.
- c. The concrete mix shall be designed to the same requirements as herein before specified and may be richer in lubricating components in order to allow proper pumping.
- d. Concrete shall not be pumped through aluminum pipes.

G. Vibrating and Compacting

- a. All concrete shall be thoroughly consolidated and compacted by suitable means during the operation of placing, and shall be thoroughly worked around reinforcement, embedded items, and into the corners of the forms. All concrete against forms shall be thoroughly spaded. Internal vibrators shall be used under experienced supervision and shall be kept out of contact with reinforcement and wood forms. Vibrators shall not be used in a manner that forces mortar between individual form members.
- b. Vibrators shall be flexible electric type or approved compressed air type, adequately powered and capable of transmitting to the concrete not less than seven thousand (7,000) impulses per minute. Vibration shall be sufficiently intense to cause the concrete to flow or settle readily into place without separation of the ingredients. A sufficient number of vibrators shall be employed so that complete compaction is secured throughout the entire volume of each layer of concrete. At least one (1) vibrator shall be kept in readiness as a spare for emergency use. Vibrators shall be such that the concrete becomes uniformly plastic with their use.
- c. Vibration shall be close to the forms but shall not be continued at one spot to the extent that large areas of grout are formed or the heavier aggregates are caused to settle. Care shall be taken to not disturb concrete that has its initial set.
- d. Where conditions make compacting difficult, or where the reinforcement is congested, batches of mortar containing the same proportions of cement to sand as used in the concrete shall first be deposited in the forms, to a depth of at least on inch.
- e. The responsibility for providing fully filled out, smooth, clean, and properly aligned surfaces free from objectionable pockets shall rest entirely with the Contractor.

3.04 CONSTRUCTION JOINTS

- A. Construction joints shall be located a maximum of 40 feet apart. If, for any reason, the contractor feels a change is necessary, he shall prepare a placing plan and submit it to the Owner or Owner's Representative for approval.
- B. Where a joint is to be made, the surface of the concrete shall be sandblasted or thoroughly picked, thoroughly cleaned, and all laitance removed. In addition to the foregoing, joints shall be thoroughly wetted, but not saturated, and slushed with a coat of grout immediately before the placing of new concrete.
- C. Approved keys shall be used at all joints, unless detailed otherwise.

D. Forms shall be retightened before placing of concrete is continued. There shall be an interval of at least 48 hours between adjacent pours.

E. Bonding Concrete at Construction Joints

- 1. To new concrete construction joints:
 - a. Thoroughly clean and saturate joint with water.
 - b. Cover horizontal wall surfaces as specified in this Section, and immediately place concrete.
 - c. Limit concrete lift placed immediately on top of bonding compound to 12 inches thick.
 - d. Thoroughly vibrate to mix and consolidate bonding compound and concrete together.

3.05 BONDING NEW CONCRETE TO OLD CONCRETE:

- 1. Mechanically roughen existing concrete surfaces to a clean, rough surface using appropriate mechanical means to remove the existing concrete surface and provide a minimum roughness profile of ¼-inch.
- 2. Saturate surface with water for 24 hours, cover with epoxy bonding compound and place concrete as specified for new concrete.

3.06 EXPANSION JOINTS

- 1. Expansion joints shall be located as shown on contract drawings.
- 2. The joint shall include a joint filler, a bond breaker and joint sealant and installed as indicated on contract drawings.

3.07 JOINT SEALANTS.

- 1. Prepare surface in accordance with manufacturers directions.
- 2. Apply primer as recommended by sealant manufacturer.
- 3. Install sealant with the proper tools and methods as directed by the sealant manufacturer.

3.08 PATCHING

- 1. Immediately after stripping forms, patch minor defects, form-tie holes, honeycombed areas, etc., before concrete is thoroughly dry.
- 2. Repair gravel pockets by cutting out to solid surface, form key, and thoroughly wet before placing patching mortar consisting of 1 part cement to 2 parts fine sand; compact into place and neatly finish. Honeycombed areas or gravel pockets which, in the Owner's Representative's opinion are too large and unsatisfactory for mortar patching as described above, shall be cut out to solid surface, keyed, and packed solids with matching concrete to produce firm bond and surface.
- 3. The Contractor shall do all the cutting as required by himself or other trades. All such work shall be of the minimum size required. No excessive cutting will be permitted, or shall any structural members or reinforcement be cut.
- 4. The Contractor shall do all patching after work by other trades has been installed, where required, using Portland Cement Mortar 1:2 mix.

3.09 PROTECTION AND CURING

1. Protect concrete from injurious action of the elements and defacement of any nature during construction operations.

- 2. Keep concrete in a thoroughly moist condition from the time it is placed until it has cured, for at least (7) days.
- 3. Carefully protect exposed concrete corners from damage.
- 4. Allow no slabs to become dry at any time until curing operations are complete. In general, slabs shall be cured with non-staining curing paper, hosing or fog spray; vertical surfaces shall be curing with Burlene or fog spray or an approved curing compound.
- 5. Protect fresh concrete from drying winds, rain, damage, or spoiling. Curing paper shall be lapped 4 inches minimum at joints and sealed with waterproof tape.

3.10 CONCRETE FINISHES

- 1. Unexposed Surfaces: All unexposed surfaces shall have any form finish, at the Contractor's option.
- 2. Wearing Surface Finish: Float the surface by hand using a wooden or magnesium float. Finish with a flexible bristle broom. Permit surface to harden sufficiently to retain the scoring or ridges. Broom transverse to traffic or at right angles to the slope of the slab.
- 3. Addition of Material: The addition of cement, sand, water, or mortar to slab surfaces while finishing concrete is strictly prohibited.

3.11 DEFECTIVE WORK

- 1. The following concrete work shall be considered defective and may be ordered by the Owner or Owner's Representative to be removed and replaced at Contractor's expense:
 - a. Incorrectly formed.
 - b. Not plumb or level.
 - c. Not specified strength.
 - d. Containing rock pockets, voids, honeycomb, or cold joints.
 - e. Containing wood or foreign matter.
 - f. Otherwise not in accordance with the intent of the Drawings and Specifications.

END OF SECTION